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MAGNETO-ELECTRICITY,

OR,

ELECTRO-MAGNETISM,

MEDICALLY APPLIED

FOR THE

CURE OF DISEASE.

Designed to accompany KINNE'S MAGNETO-ELECTRIC AND
ELECTRO-MAGNETIC MACHINE, containing instructions for
its use, and Reference to Cases of Practice.

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MAGNETO-ELECTRICITY,

OR

ELECTRO-MAGNETISM,

MEDICALLY APPLIED TO

THE CURE OF DISEASE.

THE application of the above agent, to the cure of those diseases for which he deemed it appropriate, has engaged the attention of the Author for the last eight years, almost constantly, as the prosecution of his professional duties gave occasion,—and as a matter of course, we shall claim some experience, which we believe has matured knowledge enough to entitle it to the term science, without assumption or arrogance on our part. In detailing the cases and diseases, in which we deem it highly serviceable, we shall be careful not to mention a disease, in which we believe the physician can get along as well without as with it, or, we will say, much more certainly, and in less time, obtain a more perfect cure, with greatly less liability to relapse.

In these few pages, that are designed only as a hand-book to accompany the Machines, and direct in a particular manner the mode we have found the most successful, under the different circumstances in which we would recommend its use ; it need not be expected that we are going into an elaborate and thoroughly scientific discussion, to prove beyond all question or dispute, every thing we state, to make it clear to the scientific physician, and equally clear to an unlettered man, because it would extend the size of this book beyond its appropriate limits.

We intend to follow this little volume with another, of a larger size, the design of which will be to treat the whole subject fully, in as scientific a manner as the present state of our knowledge will allow, in which work we shall try to embody all that is known on this most interesting subject that has been published, and we shall here take the liberty of referring every one, that wishes a more full elucidation of every subject mentioned in this book, to the other volume, in which they will find all matters pertaining to Electricity and Magnetism, as applicable to the cure or treatment of disease, fully discussed.

It may not be improper here to state, that if this hand-book should fall (as we sincerely hope it may) into the hands of intelligent Physicians, who are not practically acquainted with this subject, they may possibly be disposed to lay it down with a casual look only, and pass it over in a careless way, without thought or reflection. To such we say, if they wish to ask any questions, in relation to the subject proposed to be treated here, or rather spoken of here and treated of in another volume, we would simply refer them to it.

As some statements of cures that will barely be mentioned here, with the mode of using the apparatus, may seem to many well read men in the profession, as almost beyond belief; and they may be inclined to give the impression to those who naturally look to them for an opinion candidly expressed, that the story was too strongly colored, we simply say that nearly all our patients thus treated are still alive, and can speak for themselves: and those three or four that are not, have friends living, and we shall take pleasure in referring to them personally, as we have that privilege, as well as to several professional gentlemen of eminence in and out of the city, who are both living and willing witnesses on personal application, to nearly all the cases referred to.

For the reason above stated, that nearly all the patients that have been the special subjects of this mode of treatment are still living, their names and residences will be omitted in the report of cases in the large volume, and in the mere mention of the cases in this pamphlet, as a matter of *delicacy*, but will be cheerfully given on application to the author.

Some of our co-laborers in the profession may be led to imagine also from the manner in which we speak of Magnetism that we would consider it "*a cure all*," or as among the "*infallible remedies*" of the day, so ridiculously exhibited in all the journals; far from it, we consider it an invaluable remedy in a vastly more extensive application than has been, or is now, generally understood, or conceded by the profession, and ought in all cases to be in the hands of, and directed solely by intelligent professional men, who well understand the details of Anatomy, and principles of Physiology, as well as theory of disease, in order to obtain its advantages, and then there must be many failures, if you have a machine of faulty magnetic arrangement in its structure, which no one can decide if they have not made the matter a special object of study and experiment.

It is to be understood also that we prescribe all those remedies when the case requires them, that we used before we employed this agent, with some modifications and exceptions. The exceptions are, that some cases require no other remedy, and get perfectly well in a much less time than with any other mode without magnetism, as we call it, or electricity, as it is generally called by others; and this fact to us, is a sufficient reason for so doing. The modifications are that in many cases we do not find occasion for using more than from one-fourth to one-tenth of the medicine that would be called for without it, and those we use, are much more potent in their effect, and as cures are usually effected in from one-third to one-half the usual time, there is no occasion for, nor chance to use as much other medicine, and the least medicine taken is always best, after having produced the effect desired.

The reason why, when we judge it necessary to use other remedies, we combine magnetism with them, if the case be a proper one for the use of that agent, is because they make each other more efficient, and recovery is made more certain, in less time, and we deem that sufficient cause for the union of all the means we can get, and some cases positively cannot be cured without both.

It should be distinctly borne in mind, by both the professional and non-professional reader, that we are speaking now only of a class of diseases to which we have especially devoted our attention for the last eight years, under the general head of all forms of Scrofula, Nervous Diseases, Rheumatism, Deformities of Spine and Limbs, Parralysis, Female Weaknesses, and Chronic Diseases generally, and that we are referring to none of the common forms of acute disease, except Spasmodic Affections, such as Colic of any form, which is perfectly under the control of this agent, as will be seen by cases aduced.

We need make no apologies for an honest effort, however feeble, to introduce to our co-laborers in so noble a profession as the healing art, a more extended application of an old remedy or agent, in a new form, in many forms of disease wherein its efficacy may have been considered doubtful, as an agent of great power and usefulness to accomplish some objects for which nothing *can* be *substituted of equal efficacy*.

The great success which has attended the use of Electricity in some hands, and the failure of it in others, must of course, depend upon two or three plain circumstances. One

may have misjudged the case for want of observation, and experience, another had a machine that was all intensity and no quantity, and hence not magnetic in its structure, and effect, and therefore not tonic and anodyne in its influence, hence, in many cases where the agent is of immense value, it must fail. Again, there may have been a want of the proper mode of its application, to secure the desired effect, all of which it will be the desire of the author to point out and obviate.

Again, its detail of application, and the labour of doing the same, is too often left to persons entirely unlettered, and of no skill; and the hitherto want of proper instructions, in sufficient detail, have given rise in the great majority of cases, to random modes of application, and if relief came from it, it was a matter of chance altogether, rather than certainty.

When cases for its use are properly judged, and the application properly made, there is no more uncertainty or doubt about the result that will follow, than if you take a suitable dose of opium, that, in due time you will lose all sense of pain, and feel inclined to sleep, and there need be no more uncertainty of obtaining the legitimate results of Electricity, if you have a properly constructed machine of a suitable magnetic arrangement, in the one case than the other.

In this city we are aware that the remedy has been for the most part, in the hands of unprofessional men, empirics and seventh sons, and in one instance, if we may believe the advertisement, *a seventh son of a seventh son*, who may be supposed to know as much about diseases, and means proper to restore them, as children, except they may be, as they claim in some instances to have been, the subjects of a special revelation, and by divine appointment commissioned to heal; and strange to say, some of our doctors have permitted their patients to go to them, either for want of time, knowledge, energy or industry to do it themselves.

The author is aware that in the great labour and hurry of business, with those professional gentlemen who do the great proportion of the business of this city, it would be impossible for them in a general practice, to do the drudgery of applying electricity themselves, hence their manifest duty to put it into the hands of an experienced operator of known skill.

Some of the physicians who have an extensive practice in this city, have been in the habit of calling on the author when they had a case which they believed would be benefited thereby, either for his judgment respecting its utility, or to make

the application, and we are disposed here to say to medical men, we shall take pleasure when called on by them, or at their instance, for either an opinion or to serve a patient with electricity, in rendering either or both, in a manner satisfactory to them and their interests.

On the occasion of the great calamity at the Ninth Ward Schoolhouse, where over forty children were ushered into eternity in a few minutes, only one was saved, and that was by the prompt application of Electro-Magnetism by a physician who understood its uses and powers, and was prepared to do his duty. It is as easy to believe that all of those children, except those that struck on the bare floor, might have been saved, if proper and prompt means had been used, such as that physician did use, namely, an Electro-Magnetic Machine, to re-animate and revivify the vital spark, and set the whole animal machinery in motion, which had stopped only (from the stunning concussion of the fall,) and were not dead.

It is just as certain, that they all might have been saved, that had not their skulls or their chest and ribs broken, as ONE, for it was only suffocation, and so severe that reaction would not take place without help; and in many cases it might have been produced as long as fifteen minutes after the fall, and some doubtless much longer, and one machine alone, in prompt and expert hands, should have saved eight or ten, and one minute to each child with a proper machine well directed, would have been sufficient to set the heart and lungs in motion, of course but feebly at first, and then it could be passed to another, and another, and so on, till it could come around to the first again, to strengthen more the action of the heart and lungs, and of course all the functions and powers of life. It was stated as a distinct fact, by the coroner, that almost all the children that were dead, exhibited scarce any signs of bruises or violence, a conclusive argument that they were only stunned, or in a state of suspended animation, which is positively under the control of these means promptly applied, and a host of other conditions equally fatal in their consequences with ordinary remedies, (BECAUSE YOU CAN GIVE NOTHING BY THE MOUTH;) for instance, an overdose of opium in any form, a state of dead drunkenness, a blow on the pit of the stomach, on the throat, under the ear, on the head, recent drowning, suspended animation from gases, any stunning and violent fall, catelepsy, and in fact all and any of those conditions in which the functions of life are suddenly interrupted and suspended

for a time, which must result in death, if reaction be not within a few minutes produced. *We say all of these conditions are POSITIVELY* in the CONTROL of this AGENT, and the undue effect of chloroform would be overcome by it if promptly used.

It will not be long before a physician will be just as sure to be provided with a magnetic machine as he is now, or has been for fifty years back, with a common lancet, that it shall be a part and parcel of every family medicine chest, as it is not unfrequent that children fall, or get an over dose of opium in some form, have spasms and colic, which, with this little manual in the hands of a sensible judicious mother, could always be promptly remedied before a doctor could get to the house; that a ship will not be allowed to go to sea without being provided with a Magneto-Electric Machine, as frequent occasion offers for its prompt use in drowning, in which state we verily believe that a resuscitation may be produced as late as thirty minutes after immersion, in some instances, where vitality is strong in the subject; stunning falls and blows also frequently occur; colic it will stop at once, and we believe confidently from the effects of it in other conditions of feeble vitality and deficient nutrition, that SCURVY nor RHEUMATISM, both great scourges of a seafaring life, cannot exist in a person that will use this agent every day. An army surgeon will not admit that he is equiped without it for camp service, and they are as necessary to a soldier as to a citizen in private life, and as exhaustion is so easily controlled with them by imparting to the patient the elements of energy and life, from whatever cause produced, as from excessive loss of blood, exhausting and protracted disease, or injury, and from mortification, &c., it is scarcely possible, that any army or navy surgeon, or captain will any longer allow themselves and men to be unprovided with a means so incalculable in its benefits under such a variety of circumstances, and the saving of one human being (as an important officer of a ship or army), may decide the event of an enterprise or campaign. In the active engagements of an army, men are often destroyed by the stunning concussion of a cannon ball passing near the head or stomach without their being actually wounded, or their skin broken, from the violence of the shock given to the nervous system—in all such cases you have a perfect remedy with this agent timely applied. When human life is properly valued by our civil authorities, every police station will be furnished with the ready means

When human life is properly estimated by the civil authorities, every police station will be furnished with the facilities which this agent affords for immediately applying a remedy that will overcome the action of opium and similar narcotic poisons, and furnish relief in all of the before-mentioned conditions from casualties.

Railroad trains and steamboats should also be furnished with this apparatus. A Magneto-Electric machine is always in a state ready for application, and there is never more trouble to set it in action than a watch, nor is it more likely to get out of order; and any body that can wind it up, and read the directions that are given in this little book for its use, under different circumstances, can apply it properly.

Look at the emergencies that sometimes arise in a moment with an accoucheur or midwife, when the mother may be saved from a fatal flooding by its timely use, in half a minute; or a child apparently still born, be made to give signs of returning life and animation almost instantly. Joy and gladness pervades every countenance in an instant, when attended by a professional man fully up to the times and improvements in his profession, where only a moment before the most awful and impending consequences awaited and threatened to cover a family's hopes and happiness in ruin and mourning. Such a physician indeed is a ministering angel, spreading hope, comfort and happiness around him. In him merit would receive its reward, and ignorance and assumption would soon be taught their proper level, and learn the mistake of their lives, that they are engaged in the wrong business.

KIND, QUALITY, AND BEST FORM OF MAGNETO-ELECTRIC AND ELECTRO-MAGNETIC APPARATUS FOR MEDICAL PURPOSES.

It is quite proper in this connection that we should give a general idea of the various sources of Electricity, Galvanism, or Magnetism, as the case may be, that is designed for medical use.

In this handbook, which is only designed to accompany the machines, and serve as a mere guide to the mode of their ap-

plication, which we have found most serviceable, which shall also contain a simple enumeration of the diseases to which we have applied this agent, it can by no means be supposed that we can enter into its history or philosophy; but must reserve all those matters for the volume that is to follow, on the subject of the Magnetic treatment of disease. Therefore we shall confine ourselves to the mention of some of the most common means of obtaining the agent; different apparatus for that purpose; their qualities; such as are good, and such as are good for nothing, in a comparative sense; and a statement of some of the reasons why they are useless, as compared with others differently arranged.

FIRST.—The *Common Electric Machine*, where the current is obtained from a glass plate, or cylinder, is of no value (as compared with other arrangements hereafter mentioned,) as a medical agent, and is of use only in cases of palsy or paralysis, and in conditions of great torpor of the nervous system. In all other forms of disease it is as likely to do injury as good, and more so, if the shocks be strong, especially in highly nervous persons, as it will increase nervous sensibility, and of course do harm.

SECOND.—The same general remarks are equally applicable to the current as obtained from the *Galvanic Battery*, whenever it is given in shocks as from a large or strong battery. This form of obtaining the current is only useful for surgical purposes, as for the cure of Aneurism, Nevæ Materni, Cataract, &c., (in which cases you do not use shocks,) and for some other forms of disease where a very small current is wanted, applied constantly, on one or more parts of the person, where no shocks are obtained or desired.

A very small arrangement where the current of Galvanism is used, is always best, as a large or strong one will derange and unsettle healthy nervous functions, operating like small strokes of lightning. It is certain that if Electricity and Galvanism are indiscriminately used, we should do much injury, where in the majority of cases, Magneto-Electricity would be highly useful, if not indispensable.

It now remains for us to speak of the more common apparatus lately in use, called Electro-Magnetic machines, of a great variety of form and arrangement, for the purpose of giving to a patient a current, sometimes called galvanism, by some electricity, and by others indiscriminately one or the other whichever they utter first, and by some Electro-Magnetism

which, when the current is obtained from this latter apparatus, is doubtless much more correct. We shall assume to call it *Magnetism*, as being in our judgment most correct, and yet it is originally Electricity in different forms; combinations and arrangements modify the result, or make a new compound. We cannot illustrate it better than by saying that common water is composed of certain proportions of oxygen and hydrogen, and yet oxygen and hydrogen gas put together in their proper proportions will not make water, till something else is done. Now pass a current of electricity, galvanism, or magnetism through the gases and they become water, pure, limpid, and tasteless, so instantaneously that you cannot see the change. Now it is neither oxygen nor hydrogen, nor anything in the least degree like them; it is water. And so we say that the effect of combination and arrangement gives a result, *Magnetism*, as the therapeutic effect of the machines in diseased human subjects. It may not be known to all, that magnetism in the human subject in a state of health, and proper degree of strength, produces no sensible effect whatever, unless it be to make health more perfect and vigorous, as in one instance which came under our immediate notice, in which the person was in the habit of passing a current of magnetism through his system for from two to five hours at a time, according to circumstances, and the only change perceptible was an entire disappearance of a disease commonly known as Dyspepsia; the return of an excellent appetite; an entire release from Rheumatism which annually attacked him, from his youth up; so severely as to render him nearly helpless; and instead of weighing from 128 to 135 pounds, as an extreme in good health, his weight, during the last eight years, has ranged from 175 to 186 pounds, with a continual desire for exercise and fresh air, and an increasing strength and vigor under ordinary labors. From this and similar cases, we infer that the agent which we call *Magnetism* is a natural agent, as water or air; and that the agent is natural to all living matter in a certain degree, and that all beings are provided by nature with means to supply it from natural sources. When the means, sources and supply are not interfered with by disease, accident, or the common causes that interfere with the functions necessary to health, of course we are well; but when deranged, the magnetic forces are also deranged, equilibrium destroyed, and the Magnetic machine furnishes the source of an artificial supply of what we call *Vitality*, the vital force of animal functions

which constitutes health. We feel satisfied that the agent afforded by Electro-Magnetic and Magneto-Electric arrangements is vastly superior as a remedial agent to the primary currents obtained from the two first arrangements spoken of, *because it is Magnetic*, and the machines also are relatively valuable the one to the other, as one is more magnetic than the other.

THIRD.—We come to consider those forms of apparatus that are, under all circumstances, better than either of the aforementioned, because they are, or ought to be, Magnetic in their arrangement, and hence their great value under circumstances where either of the other two, may do much harm.

Electro-Magnetic Machines are such as derive their current from a battery by the decomposition of metals with acids, which is conducted by wires, from the battery through a coil of insulated coarse wire, (being the quantity coil,) inducing a secondary current in a coil of fine insulated copper wire, (which is the intensity coil,) and is taken off by means of conductors to use on the patient. In the centre of the coil of coarse copper wire is a large space filled up with a bundle of soft iron wire, of the length of the coil surrounding it, which constitutes the MAGNETIC ARRANGEMENT, upon which the Machine chiefly depends for its excellence as a remedial agent, and is valuable only as the relation between the quantity coil and the magnetic arrangements are maintained; and in the instruments here described, the variation is made only in the intensity coil, which varies the sensible effect of the shock, and never alters its magnetic force. In all others, the sense of the power of the shock is varied by altering its magnetic force, leaving the intensity the same; and this is the *sole cause* why many nervous and delicate people have either received no benefit from the use of this agent, or a positive injury may have followed. For, to the same extent they withdrew the bundle of wires from the hollow of the cylinder of wire, they reduced the magnetic force of the machine, and it approached in quality the two forms first mentioned, and lost its anodyne and tonic properties, the motive force, or vitality of the agent. Hence no machine of this kind should be employed where the bundle of wire is to be drawn out to diminish the sensible force of the current, as that injures or destroys the agent, as a remedy. Again, the quantity coil of wire should have a proper relation to the Magnetic quality, while probably the facts are that nine out of ten of the Electro-Magnetic machines that are

found in market, are constructed in such a manner that, in order to modify or weaken the sensible strength of the current, you are compelled to draw out the bundle of soft wire, and thereby in the same proportion to destroy the best quality or magnetic force of the machine. Hence result the many failures in the use of them. Being designed and arranged *by mere mechanics who know nothing of their use, or what is essential to render them valuable as medical agents*, the great majority of those we have seen, and we have examined nearly all that are manufactured in this country, are arranged for intensity, or to give strong shocks, without any relation to quantity, the very quality which renders these machines of vastly more extended benefit, when properly made, than the simple primary galvanic or electric current; and this is the main and almost the *only reason why medical men have been disappointed* in the results desired to be obtained, in many cases, where their judgment was correct. Again, their intensity arrangement is generally so high, that in order to reduce the strength to suit the case of a child, or a delicate and sensitive person, you have to draw your induced magnet almost out of the coil, or helix, and you have a current all intensity, and the *least degree of magnetism*, so that indeed, in a highly nervous and irritable case, you have a machine unfit for them to touch,—neither anodyne, tonic, or strengthening—while in those that are made properly, as *in our machine*, the magnetic quality is never changed, it is always the same, the intensity is alone varied, or that part which gives the force to the shock, without altering its magnetic quantity or quality.

The opinion of many, that the strength of the sensation is the only essential quality in the instrument, is therefore erroneous. The truth is, that it has very little to do with the quality or value of the agent as a remedy.

FOURTH.—Magneto-Electric Machines are those that derive their primary current from a permanent magnet, by means of a revolving armature and helix of insulated copper wire against the magnet, taking the induced current for use through the conductors to the patient, and giving the best agent of *any*, for the cure of disease; and may be so constructed as to be of equal value for all surgical purposes hereinafter mentioned. There are some objects to be attained in the practice of surgery that require an especial arrangement.

This machine requires no battery, acids, nor consumption of metal, or cost to run it. It is moved by a spring, and

wound up like a watch, may go by a weight like a clock, or be turned by a crank ; and if not injured by bad treatment or accident, will last a lifetime. The quantity and magnetic forces of the machine are always the same, as well as the intensity. The variation of the sensible shock is made by varying the amount of the primary current.

These machines are arranged to give great rapidity to the interruption of the current, and hence are free from those disagreeable, jerking, and injurious sensations, that all machines of this kind have heretofore given ; and as the primary current in this form is magnetism, they are magnetic and electric.

FIFTH.—It cannot be too strongly urged never to apply any of the forms of electricity or magnetism directly to the brain, except it be known before beginning that the machine is brought to the weakest possible power, and then it may be very gradually increased to what the patient may well bear. It is always best applied to the head through the hand, first wetting the hair to the skin over the place to which it is to be applied.

The above rule for beginning with any new patient in the application of magnetism to any part of the body is important, especially to children and nervously sensitive persons of either sex, as the force is readily increased by degrees, till it is ascertained what they can bear. If it ever is wanted stronger than the machine usually gives, when all the strength is on, the place where it is desirable to apply it can be wet with vinegar, or salt and water, either of which will much increase its force : and in many instances of disease of the skin or surface of the body, it increases its efficacy.

Again, it is expected under all circumstances where either or both poles are applied to the skin or surface of the body, other than in the hands, that the poles will be covered with a soft sponge and wet. If sponge cannot be had, cloth or chammoise leather will do ; and in some cases of skin disease the sponges may be wet with salt and water, or vinegar, with increased benefit.

We know of no circumstances where any exposure of the body, necessary in using the machine, is likely to expose the patient to take cold, unless it might be in inflammatory rheumatism, or neuralgia, in which cases the patient should be screened from cold air, though we never knew of any unpleasant consequences, arising from any necessary exposure in a room of comfortable temperature, and believe the influence of the agent to be a protection against such danger.

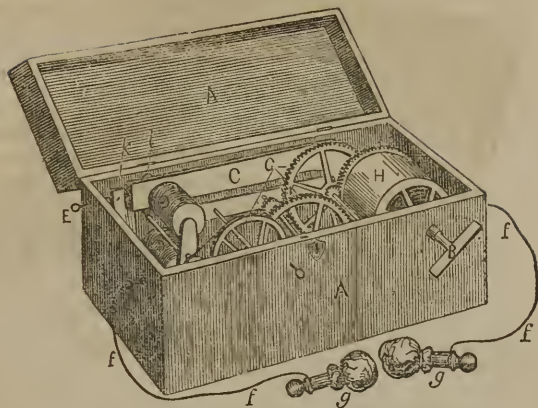


FIG. 1.

DR. KINNE'S

MAGNETO-ELECTRIC MACHINES.

FOR MEDICAL PURPOSES,

(Patent applied for.)

(Manufactured and Improved by A. DAVIS, late of Boston.)

Fig. 1.—Represents a self-operating machine for the above purposes.

A. A.—A box containing a machine.

B.—The key by which it is wound up and set in motion.

The little brass head in front of the box at the left of the keyhole is a stop; by crowding it in, it stops the machine, and pulling it out lets it run when wound up.

E.—The brass head, at the left hand end of the box, is attached by a wire to a piece of iron across the end of the Magnet, on the back side, which is an armature, and also regulates the strength of the current—by crowding it on to weaken it, and pulling it off to strengthen it, and when the Machine is out of use it should always be left on.

f. f.—Conducting wires introduced into the holes in the brass heads in the end of the box.

g. g.—The poles or handles to apply to the patient, with sponges tied on to them, which should be wet when used.

The wooden ends are to take hold of when you use it on others, and the metal ends to get the current yourself. The wet sponges and handles should never be put in the box.

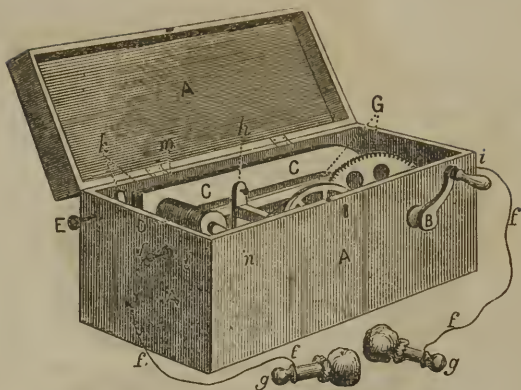


FIG. 2.

Fig. 2, A. A—Represents a box containing a machine, moved by a crank.

These machines are very portable, being nine inches by three and a half and four.

B.—Crank screwed on the shaft of the driving wheel which can be taken off.

C. C.—A Magnet.

D.—A helix, revolved as near the end of the magnet as can be and not hit, regulated by screws at the further end of the shaft.

E.—A brass head, connected by a wire to a piece of iron, standing across the end of the magnet on the back side, which is an armature, or keeper, and also regulates the strength of the current, by crowding it in to weaken it, and pulling it out to increase the strength of the current, and when the machine is out of use, it should always be left crowded in.

f. f.—Are the wire conductors that take the current from the machine.

i. i.—At each end of the machine, are the brass wires introduced into a hole in a brass head to get the current.

g. g.—The handles, at the end of the conductors, here represented with a sponge tied on them to apply to the patient. The sponges should be wet before applying them to the patient, and the wood at the end of the handles are to take hold of while applying it, that the current does not affect the fingers of the operator.

All those parts that have much motion should be touched occasionally with a drop of oil, and the wet sponges and handles never be put inside the box. This machine can be operated from the outside, with the box closed, and therefore cannot be disarranged.

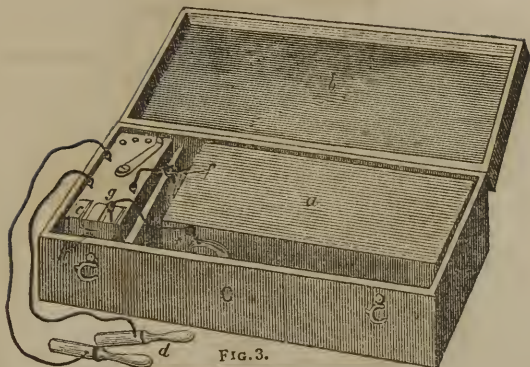


FIG. 3.

Fig. 3. C. b.—Represents a box containing a Magneto-Electric Machine, very portable, five inches long, two and a half deep, and three wide, can be carried in the pocket, and will run well 24 hours.

a.—A compound battery, worked by two elements. f. A screw head to be taken out and a large spoonful of common salt put in, with water enough to fill it, when the zinc is screwed in again.

e.—Another screw head on the side, to be taken out, and into the hole put an ounce or two of Sulphate of Copper, or Blue Vitriol, fill up with water, screw tight, and shake the battery, then put it into the box and introduce into the holes in the screw heads.

e. f.—The ends on the short conductors that come from the machine g, and give it a sudden hit, and it will start to give the current, and you get the sensation by taking in the hands the two poles d, one in each; you increase or diminish the strength by turning the brass piece on the top—to the right to increase, to the left to decrease the sensation—on one of the small brass heads on the further end of the machine. This machine is useful for all medical purposes, and better than any other Electro-Magnetic Machine offered to the public, for the reasons set forth under the head REMARKS ON MAGNETIC MACHINES. This machine is useful for medical purposes and not for surgical cases, as the current is interrupted.

FIG 4.

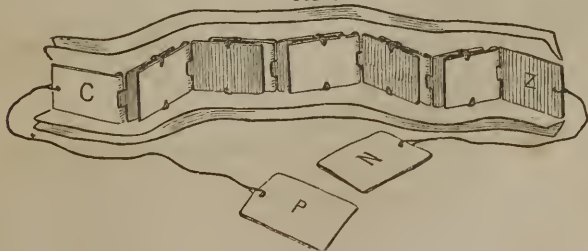


Fig. 4.—Represents a Chain Battery for local and constant application with a continuous direct current, and may be used for any surgical purpose.

It is useful for all local applications, where a mild, continuous current is wanted, and by increasing the series it gives the kind of current wanted for any and all surgical purposes.

C. & Z —Represent the two metallic elements of which it is composed.

The inner of the two outer lines represent a thin India rubber covering, the outer line represents a covering of morocco, in which, after having been taken out of them, and put into strong vinegar, and laid a minute or two, until the substance between them becomes fully wet, the chain is first wrapped in the India rubber cover and then in the morocco and made fast with tapes; then it may be attached about the person, and the two poles marked N. and P., covered with chamois leather or cloth, and also wet in vinegar, may be applied to the naked skin of the parts desired, and made fast with tapes, always putting the poles from the C. end of the chain to the diseased part, and the other on some healthy part, generally to the spine. If a strong current is wanted, use Sulphuric Acid, two drachms to a half-pint of water instead of vinegar.

The following cuts represent handles attached to the conducting wires that bring the current from the machine for its Medical application to the patient,

Fig. 1.—Is a handle of brass or other metal with a wooden end to take hold of when you do not wish to feel the current in your fingers or hand. If it is desired to feel the current in the hand, you clasp firmly with the whole hand the metallic part only.

Fig. 2.—Is the same as Fig. 1, only it is represented with a piece of soft sponge tied on to the end of it, which must always be wet with water, cologne, or vinegar, when you wish to use it.

Fig. 3. & 4.—Are handles for the same purpose as Fig. 1. & 2, with button metallic ends with corks instead of wood, one with a sponge tied on, and the other not. These handles are always attached to the machine by pressing the small brass wires at the other end of the conducting wires into the holes in the little brass heads at each end of the machine.

Fig. 5.—Is the form of a conductor to be applied to any small surface.

Fig. 6.—Is a conductor to apply the current to the inner part of the ear.

Fig. 7.—Is a conductor to apply the current to the eye.

Fig. 8.—Represents an instrument for application to the womb, and is either insulated or not, as may be desired.

All conductors of any pattern or style, for medical and surgical purposes will be furnished when ordered, at a small advance on cost by the agent.

None of these handles or conductors, and specially the wet sponges should ever be put inside the box, for any convenience, as the gearing might become deranged by it.

It is always necessary, to feel the current to be in connection with both poles, either directly yourself, or with some other person, or conducting medium between you.



Fig. 2.



Fig. 1.



Fig. 4.



Fig. 3.



5



6



7



8

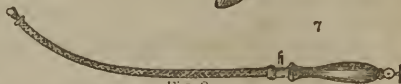


Fig. 8.

PROPER CASES

FOR THE

APPLICATION OF MAGNETO-ELECTRICITY AND ELECTRO-MAGNETISM IN DISEASE.

ASPHYXIA ; OR SUSPENDED ANIMATION IN NEW BORN INFANTS.

Infants apparently dead when born, that have not been so more than half an hour, can be re-animated by the use of Magnetic-Electricity properly applied, and all good accoucheurs or midwives, will know the condition that will probably exist with the child at the moment of birth, by signs common to such cases, and they should be in a perfect state of readiness to act, the moment of the birth of a still born child to re-animate it, by setting at once the nervous and respiratory functions in action. We know of nothing that could furnish an apology for a physician who is without the means at hand, for ready and prompt action at a time of birth in any emergency, to the parents who look to them for a full performance of all duties, the responsibility of which they offer to assume. The mode of using Magneto-Electricity would be to pass the current through the chest from the spine or the nape of the neck to the chest, over the lungs, heart and stomach, with a moderate power, and let the current pass through the hands of one or two assistants, (never apply it to the head ;) and unless the child has been in this state so long that the nervous system has lost all irritability, you will surely restore it. We might, under an extreme case, where apparent death had existed some time, give two or three quite smart shocks, but they are by no means to be continued. [See Brath. Ret. part 4, pp. 126, 127 ; part 7, p 34.]

ASPHYXIA FROM DROWNING.

Whenever Magnetism or Electricity can be commanded, you have a sure means of relief in this case, if applied within

an hour, if the individual received no other severe injury at the time of falling into the water. The length of time during which an individual may be resuscitated after falling into the water will, in a measure, depend on the degree of strength and vigor he possessed before submersion, and any injury or violence he may have received at the time of falling, and under favorable circumstances we should not neglect to make an effort as long as an hour and a half; but at this late period we should not feel satisfied perhaps short of making a slight incision on the nape of the neck lengthwise, and one or more over the pit of the stomach, the heart and the diaphragm, and pass the current under a strong power through these openings in the skin.

Although the emergency of such cases warrant the above practice, yet the author believes it would very seldom be found necessary to break the skin in order to pass the current more effectively, but at the same time would never abandon a case as hopeless, until this measure had been resorted to.

MODE OF APPLICATION.—In all ordinary cases of recent drowning, it will be found sufficient to apply the current from the nape of the neck to and over the stomach, heart and diaphragm, under a moderate power to begin, and increase until you see signs of returning life with respiration and circulation commenced, and then put it at a comfortable degree of strength only, and better still at this period, if passed through the hands of two persons, each one taking a pole from the machine in one hand, and one of them putting his other hand on the nape of the patient's neck, and the other passing his unoccupied hand around and over all the seats of vitality; no measures should be neglected that are calculated to keep the patient warm and dry, such as covering him over with hot flannels. It may be well also to bear in mind, that a person that has been lying in cold water, would require a much stronger current to make them feel it to the same extent, than they would at the common temperature of the body. After the patient was revived enough to swallow, some warm water and brandy with a paregoric ʒss , or some cordial will be all that is required, besides entire rest and quiet. We would also say that the current should *not* be passed through the *incisions* as above mentioned, after the first signs of returning life are manifested as it is quite painful. [See cases thus treated in Lond. Lan. vol. 7, p. 469; Braith. Ret. part 2, p. 109: part 5, pp 63, 64, part 7, p. 31.]

ASPHYXIA BY POISONING FROM STRYCHNINE.

In this instance, as in all other cases of poisoning, by the narcotic vegetable poisons, the general rules for using Magnetism or Electricity are so nearly the same as those for drowning, that we shall only mention the conditions and variations, and refer to the head of drowning for the detail; as a general thing, it will not be found necessary to make incisions through the skin except in extreme cases where almost all, or quite all signs of life are absent, and the necessary limits of this work will not allow us to enter into the philosophy of its action. See cases thus restored in London, *Lancet*, vol. 2d, 1844, page 439, where rabbits, dogs and guinea pigs were poisoned with strychnine and brucine, and were immediately restored.

ASPHYXIA AS IN POISONING BY OPIUM.

In this formidable condition the practitioner is to confidently expect success to crown his efforts as long as there is the slightest sign of life left, and after all the efforts by the stomach pump, as well as stimulants applied to the surface are unavailing, we should not abandon the effort, if respiration had not ceased more than ten or fifteen minutes; but in this case we should at once resort to the incisions mentioned under the head of drowning as being alone reliable to begin with, and we must here repeat what we said there—not to continue the current through incisions longer than is deemed positively necessary, as it would inflict unnecessary pain, but in cases not so extreme, it will not be found necessary to make the incisions. Cold water or ice applied to the head, and the body being kept warm will much facilitate recovery. [See cases thus treated in the London *Lancet*, volume 10, page 27; vol. 1, 1852, p. 450; see Braith *Ret.* part 5, pp. 63; 64; part 5, p. 19; part 7, pp. 32, 33, 34, 35; part 9, art. 40; art. 60; art. 82; part 16, Art. 75, 77, 78, part 19, p. 218.

The manner of Magnetic or Electric treatment is so nearly the same under all circumstances of poisoning by vegetable and narcotic poisons, also from blows, falls, &c., in which case a temporary suspension of respiration and circulation takes

place—that in this connection we shall only make mention of the various means by which it occurs, and refer the reader to the treatment which is fully applicable to them, under the head of Asphyxia from Drowning, and from an over dose of opium, as the treatment there set forth is ample and appropriate.

Asphyxia by Poisoning with Aconite, Æther, Bitter Almonds or Prussic Acid, Pink Root—all treated as stated under head of Drowning and over dose of opium.

Asphyxia by poisoning with Chloroform, Alcohol or dead drunkenness, Arnica, Belladonna, Camphor, Digitalis or Fox Glove, Cicuta or Poison Hemlock, Henbane or Hyoscyamus—all treated as in case of over dose of opium.

Asphyxia by poisoning with Nux Vomica—treated as in case of Strychnine and Stramonium—see Opium and Lockjaw.

Asphyxia by poisoning with Mephitic Gases, Apocynum Canabinum, Colchicum, Kreosote, Sanguinaria, Antimony, Squills, Tobacco, Lobelia—Any of these agents in over doses, may act as poisons, suspending animation, so will over doses of emetics that do not operate, and Electricity will arouse to action and sustain the functions—all to be treated as in over dose of opium or drowning.

We refer to cases thus treated in Asphyxia from various causes, in Lond. Lan. vol. 7, p. 469 ; see Asphyxia, London Lan. vol. 8, p. 128 ; see Braith. Ret. part 5, pp. 63, 64 ; part 7, pp. 32, 33, 34 ; part 9, Art. 9 , part 11, p. 46.

PROLAPSUS, OR FALLING OF THE WOMB.

For the past eight years the author has been successful in curing every case of this great bane of female existence in a very short time, and with very little trouble, compared with all former modes of treatment of this harassing malady, and without any of those indelicate exposures, or unpleasant measures, usually supposed to be necessary. In all cases that are uncomplicated with other disease, there is no other remedy necessary to effect a cure, though sometimes we use others to hasten it, from one to two weeks. It has always been found sufficient. This is one of those forms of disease that has especially engaged the author's attention.

We use the machine, Magnetic or Electro-Magnetic, by placing one pole on the sacrum or small of the back, over the tender or aching spot, while the other pole is placed in each groin, on the forebone, and in front between the limbs, and by a vaginal conductor to the womb itself, beginning with a slight power, and increasing it in strength as the patient can bear it, continuing the operation from fifteen to twenty minutes ; and as this disease is often accompanied with cold feet, we sometimes put the feet in a warm bath as hot as they can bear, and then let the patient hold one pole in her hand, and put the other in the bath for a few minutes, always keeping the water hot, and remove the feet before the water loses much heat. We repeat the use of it every day.

LEUCORRHOEA, FLUOR ALBUS, OR WHITES.

This is also a complaint of females, not so formidable in itself as in its consequences, if neglected, as leading (like the falling of the womb) to a "thousand nameless ills" and deranged nervous and other functions, tending to debilitate the sufferer, and invite other and more dangerous complaints. This has also engaged our special attention and almost always accompanies the former difficulty. It has always readily yielded to the Magnetic treatment, both with and without the use of other remedies in our hands.

The general mode of applying Magnetism would be the same in this as above, except we might prefer a vaginal conductor not insulated, if we used any, as some do

FLOWING ; OR HEMORRHAGE FROM THE WOMB.

In this condition, so imminently and instantly dangerous to the life of the female, when it occurs at the time of, or immediately after confinement, we have not so instantly effective and certain a remedy on which we can rely, as Magnetic Electricity, to produce those necessary contractions of the uterus or womb, so indispensably necessary to arrest the flow of blood and if the accoucheur, or midwife, is prepared with and

knows the use of these machines, they never need lose a patient from flowing after childbirth. [See cases thus treated, Lond. Lan. vol 1, 1845, p. 342. See Braith Ret. part 10, p. 199; part 16, p. 274.]

IMMODERATE AND IRREGULAR FLOW OF THE MENSES, MENORRHAGIA.

This is another condition of the womb, accompanied by a slow, but more or less continuous leaking or oozing of blood, (and increased at the period of the menses,) not attendant on pregnancy, accompanied with debility, relaxation and weakness, in which Magnetism is equally effective, and requires to be applied once a day, or perhaps twice. [See application under head of Abortion. See Lond. Lan. vol. 1, 1845, p. 352.]

CRITICAL PERIOD OF LADIES ; OR TURN OF LIFE.

This is another form of irregular uterine action, and often excessive and sudden loss of blood accompanies it, which is peculiar to females between forty-two and fifty-two years of age, rarely older or younger, and is much more under the control of Magnetic-Electricity, than any other means known. See mode of using as in Prolapsus, or Falling of the Womb, Immoderate flow of Menses, and Flooding. Use the machine every day once or twice if needed.

ABORTION.—The author has always arrested the flow of blood that occurs at a threatened abortion, almost instantly, and puts an end to all pain; and where females have attempted to produce abortion on themselves, and got frightened at the flow of blood, and sent for us, we have instantly arrested it, and stopped all the pains and effort on the part of the uterus to throw off its contents. Mode of using the machine in the four conditions of flowing last mentioned. It will many times be found sufficient to pass the current from the small or lower part of the back, at the point where the pain or aching is felt, through the hips to the lower part of the abdomen, and on the pubes, but it is more efficient to apply one pole to the

back as directed, and with an insulated vaginal conductor to the other, introduce it immediately into the cavity of the womb. [See Braith. Ret. part 13, 186, 187.]

DYSMENORRHŒA, OR PAINFUL MENSTRUATION.

This is one of those conditions that gives females much suffering on the occasion of their monthly period, and like the two former conditions, is not so dangerous to life immediately as it is remotely, by deranging other functions and inviting disease to seize the victim, and should never be neglected as of slight consequence by any one that desires health in the future; and in its early stage, is always readily cured with little difficulty. Indeed we never failed in curing any case that presented itself, promptly, when it had not been neglected until it involved other organs, and produced other diseased conditions, and generally the Magnetic treatment has proved sufficient.

The application of the machine is the same as that for Pro-lapsus or Falling of the Womb, and should be commenced about a week before the anticipated period, continued through it, and for three or four days after, and this will generally prove a cure in all recent cases. In those of longer standing it may need a repetition at the next period.

HYSTERICIS, OR SPASMS FROM UTERINE IRRITATION.

Any one, or all of the above mentioned conditions of the womb, may give rise to this kind of spasms, which many times are excessively severe and troublesome to both patient and physician, and as we have in Magnetic-Electricity an agent that controls and cures all the inordinate action and irritability of the nervous and muscular functions, we have an efficient remedy that will at once control it. Physicians will not neglect the use of other means, but as this acts so promptly they would seldom have time to operate, before this agent would have the cure performed.

MODE OF USING THE MACHINE—If there is much or any pain

through the hips and lower portion of the bowels, we would use it through the small of the back and low in front as in falling of the womb, as long as that pain continued, then have a hot foot bath and put both feet in it; put one of the poles in the bath and hold the other in both hands, under as strong a power of the machine as can well be borne, if the spasms affect the whole spine, it would be well to place one pole on the nape of the neck and pass the other down the whole length of the spine, and if the muscles of the abdomen are much contracted, carry one pole over the bowels also. [See Braith. Ret. part 21, p. 87.]

SUPPRESSED MENSTRUATION, OR AMENORRHŒA.

In this condition of the female, the worst consequences are eventually to be apprehended if neglected, as it is an important and vital function, and cannot remain stopped without producing destruction of health and death as a final result, by producing other diseased conditions. The author has always succeeded in restoring the menses by Magnetic-Electricity with very little difficulty, and sometimes in recent stoppages with a single application of the machine.

The physician will generally be able to judge correctly of the necessity of using other medicines in the case, by the derangements that appear. It is necessary always to see that the bowels act every day, and when we use this agent we begin about ten days previous to the anticipated time of the period, to correct such morbid conditions of the general health as appear in the case, and about a week before the time to look for the period, we begin to use Magnetism once a day as in falling of the womb, and in painful menstruation, and continue it up to the time the period should have come on and passed, and if it do not appear, as it almost always does, the first time of trial, we then suspend it until the next time the period should appear, and repeat it as before, and never yet had to make but two trials; in the great majority of cases, the first is sufficient. [See special directions under the head of Falling of the Womb, and see cases thus treated in Lond. Lan. vol. 1, 1845, pp. 344; Braith. Ret. No. 3, pp. 22, 25, 26; No. 11, art. 142; No. 14, art. 118; No. 16, art. 176, art. 163; No. 24, p. 347.

TETANUS, OR LOCK JAW.

From the knowledge the author has of the capabilities and powers of Magnetic-Electricity in allaying all forms of pain and spasm, from general or local irritability, we should not think of an attempt to treat this formidable disease without its aid, nor should we omit to use any other means that were known, or supposed from their nature and properties to furnish the least aid, and among them we should mention Ether and Chloroform, and their free administration need by no means be feared, as Magnetism is a complete remedy for an over dose of them, as will be seen by references under the head of Chloroform.

We should apply it by holding one pole in both hands or one on the nape of the neck and the other passed all about the throat, chest, over the diaphragm and down the spine, and in a foot-bath of quite warm water by putting both feet in it, and one of the poles from the machine in the water and continue the action of the machine under as strong a power as can be borne. Strong enough at any rate to control the spasms.

Dr. Adams relates two cases of Traumatic Tetanus treated with this agent in the London Hospital. [See Lond. Med. Gaz. Jan. 1842.] In Dr. Adams' cases all other means had been exhausted before this was tried, and it was attended with success.

Dr. A. D. Bacon of Essex County, Massachusetts, is reported to have cured a patient with this agent solely. [See also Braith. Ret. part. 21, p. 91. Channing on Medical Electricity, p. 132.

HYDROPHOBIA.

The spasms, mania, and tendency to bite, produced in the human species by being bitten by a rabid, or mad animal is truly awful, and in most cases has been heretofore fatal in its consequences. From the knowledge of the author, of the power that Magnetic-Electricity has over all forms of irritation and spasm, (it is the spasms that destroys the patient,) we should not think of trying to cure one of these cases without bringing to our aid all the means for such purpose that may be commanded, and among them and most prominent would be

Electricity, from a Magneto-Electric machine. Chloroform and Ether would be prominent, and as Electricity is a perfect preventive from any bad consequences of an over dose, we should use them freely. As Chloroform acts by overcoming nervous sensibility, and Magnetism by harmonizing and equalizing nervous action, strengthening nervous power, by their union we should expect success in these cases. We should apply the machine by placing one pole on the nape of the neck continually, and the other put upon the tongue, throat, diaphragm and spine, and into a foot bath with both feet in—also wet both sponges with salt and water, or vinegar, and put salt in the foot bath, put the machine to act in its highest power.

Dr. Donovan of Dublin, relates a case in which he employed Electricity with success. [See Dub. Jour., May 1846 and '47.] Dr. Donovan refers to several cases reported to the Academy of Sciences of Turin, by Sir Tassalli Eandi and Sir Rossi. See also N. Y. Dissector, vol. 2, p. 55. Smee Electro Biol, p. 136.

PILES, PROLAPSUS ANI, OR FALLING OF THE BOWELS.

The above forms of disease, when they are not a consequence of other and protracted chronic diseases, from our own experience, are entirely under the control of Magnetic-Electricity. We have cured some of the most severe cases we ever saw, in a very few days, where the bowel was down badly, and strictured by the spincter of the rectum, and become so excessively tender and sore, from repeated ineffectual attempts to return it by pressure in the ordinary way, that it would create a spasm at once, and after leeches and cold water had failed to relieve. We apply one pole to the lower end of the sacrum, and the other to the perineum, and sometimes directly to the anus under as strong a power as the patient can well bear, then change and put one pole on each side of the rectum, being careful that the balls or sponges do not touch each other, and press them hard on the flesh or person, as it can be better borne under a strong power, by pressing it on hard; and by continuing the current for some time the soreness will disappear. We have relieved repeatedly the excessive pain and suffering of these cases in five minutes and less, and we

repeat the application as often as the bowel comes down and is painful, the first day may need two or three applications and possibly more; the second day about two applications, and then for from three to five days once a day after each stool will be found enough to cure a case. If, at any time, the patient feels an approach of the complaint, he can arrest it with two or three applications as above before its gets bad, and it will all pass by. It cures by giving strength and integrity to the fibre of the bowels, and any person having a machine and these directions, may at any time relieve themselves of this distressing complaint. [See Loud. Lan. vol. 2, 1851, p. 56; Braith. Ret. part. 23, p. 215; part 24; p. 204; N. Y. Dissector, vol. 2, p. 198; Channing on Medical Electricity, p. 192.

COLIC AND CHOLERA MORBUS—BILIOUS COLIC.

In the two forms of disease above, the main features of the cases are pain and spasm, and for the most part it is those two features that kill, if the patient dies.

In the first-named form of Colic, we are glad to say that for the last eight years, we have been able to cure every case in from five to ten minutes, (but more time is required to relieve all soreness,) and no other remedy has been needed, and in only one case was a second application called for, and as the mode of application is the same in this, as in bilious colic or cholera morbus, we shall describe but one mode of application for all forms of colic. [See Channing on Medical Electricity, page 104.

CHOLERA MORBUS—BILIOUS COLIC.—In this form the pain and spasm can be immediately allayed with Magnetic Electricity, and in all the cases we have seen, in less time than any other remedy could be brought to bear, or have time to produce any effect, and except it be brought on by an over meal of some crude food, it will be cured generally with one thorough application, but if the stomach be loaded with undigested or crude food, it will be likely to return if the stomach be not emptied. The physician will understand, that if this disease come on from functional bilious derangement, it should be attended to.

PAINTERS' OR LEAD COLIC.—The author has had great reason to be satisfied with the prompt relief that has followed the use of Magnetic-Electricity in this distressing complaint, doing away with all the severe and urgent symptoms at once, and giving the other necessary remedies a prompt action, and removing all soreness. [See Channing on Medical Electricity, p. 83.]

CHOLERA INFANTUM.—In this disease, after the fever has subsided, and the debilitating discharges continue, with tendency to prostration and coldness, we have derived the most happy results from this agent, in equalizing the nervous force, and as a consequence the circulation, restoring equal warmth to all parts, relieving abdominal soreness on pressure, preventing exhaustion, and in many cases it has appeared to have a favorable effect on the quality and frequency of the stools. It may be applied twice or more times a day if needed.

AN OVER DRAUGHT OF COLD OR ICE WATER.—The revulsion which is caused in the human system from a drink of cold or ice water, when we are very much heated or wearied, is sometimes followed by sudden death, and may always be relieved by the use of medical magnetism, promptly applied; it would always be well to give some strong stimulant, such as raw brandy or pepper, or peppermint essence, camphor, &c., as soon as possible.

DIARRHŒA.—In the above complaint, where it is kept up by warm weather, change of water, and debility, with a coldness the author has derived the most prompt and unequivocal help from the use of Magnetic-Electricity, often arresting it entirely at one application, and the second or third removes all tenderness of the bowels and pain. It may be repeated if needed.

DYSENTERY.—In this form of bowel disease, we should not think of using Magnetism as long as the feeble symptoms continue with much force, but as soon as they abate, it comes in with great efficacy, in allaying all pain and irritation, especially at stool, removing soreness and preventing exhaustion, equalizing the temperature, and promoting the action of other remedies.

ASIATIC CHOLERA.—In this formidable disease the medical practitioner is bound to bring all aid to his patient that can promise any assistance, and too often he fails in the best efforts. From our knowledge of its power in all forms of disease of this character, we can say with the utmost confidence that if a Magneto-Electric or Electro-Magnetic machine can be

brought to bear on a patient laboring under Asiatic Cholera early, he will not pass into the stage of collapse or cold stage, and if he already be in it, there is not so powerful an agent to bring him out of it. We have had the trial of it twice in our person, and speak from experience; the first time after the cold stage was on, and the second time we kept it from coming on. In the first instance, language would be inadequate to describe the comfort of relief from the ice-bound sensations of the cold stage of cholera; in the second attack we were at home, and resorted to it with other remedies, and we were not confined to our room two days. It should not be inferred from the above, that we omit the use of all measures that promise any assistance in these cases because, we use Magnetism. In those cases where a collapse is so severe as to simulate apparent death, and yet there appears to be an occasional twitching and drawing of the muscles, we should not despair of, or neglect making an effort with these remedies, as in Asphyxia from Drowning, for these are the conditions under which *some have been buried alive*. In such cases we should be justified in passing the current through incisions on the nape of the neck, and over the chest and stomach, if we cannot arouse the patient without. [See Lond. Lan. vol. 9, p. 316; vol. 10, p. 169; vol. 9, p. 592; vol. 8, p. 317; vol. 11, p. 169; Channing on Medical Electricity, p. 104.]

MODE OF USING THE MACHINE IN DIFFERENT FORMS OF CHOLERA AND BOWEL COMPLAINTS.

In Common Colic, or as it is sometimes called Spasmodic Colic, the poles are placed (after the sponges on the handles are wet) directly to the bowels on each side, to pass the current through or from the pit of the stomach to the lower part of the bowels, or one pole may be placed on the spine, and the other passed all over the abdomen in the painful spots, under as much power of the machine as the patient can well bear, beginning with a weak current and increasing it gradually, and continuing it until the pain ceases, and the patient is warm. In almost all cases in the early stages of any form of this class of disease, a warm gentle perspiration will break out all over

the patient from the use of Magnetic-Electricity, in from ten to twenty-five minutes, and a tendency to sleep follow. In most instances the case will be cured. The above directions respecting the manner of using the machine are proper in, and common to all forms of the disease, so far as using it on the abdomen. To remove soreness and tenderness of the bowels, which may remain after the pain ceases, we have found letting the patient hold one pole in both hands, and the operator holding one in his hand and passing his other hand over the abdomen for a few minutes will nearly or quite remove all soreness, this is also common or applicable to all forms of this disease. In Asiatic cholera we might sometimes think proper to put both hands in one hot bath, and both feet in another, and then put a pole in each with a strong power to bring about reaction in a collapse.

In Cholera Infantum we should always use the agent through the hands of two persons, and if there were coldness of the feet, we would put them in a warm bath and one pole in the bath, and one to the pit of the stomach or nape of the neck.

In Dysentery, to overcome the painful stools, we would apply one pole directly to the rectum or anus, and the other to and all over the bowels, but we would not use it, if there were high frebile symptoms. Our rule for continuing the use of Magnetic-Electricity and for repeating it is, first, until relieved from pain, and warmth is restored; and second, on any return of the symptoms.

GANGRENE OR MORTIFICATION.

In gangrenous conditions, whether from wounds, or the last stage of inflammatory action from any cause, or dry gangrene of aged persons, there is not so powerful a means to resist its approach from any cause as Magnetic Electricity, or to restore in part its inroads, or arrest its advance, and we could by no means consider a case intelligently treated by the light of science, when it was omitted, as it is necessarily fatal to the part, or the whole patient, if not arrested, and the part restored. It restores by imparting positively and in an active manner, that principle of life and vitality with-

out which we cannot either live in the whole person, or in part, as a limb, and it never can under any circumstances be omitted.

The administration of Medical Magnetism should be both general and local, and continued and repeated as the case may require; there is no occasion for a very strong current. In giving it in general, we should pass it through the whole system, and particularly over the principal seats of vitality, as the stomach, heart, lungs and spine; also to the part affected. And this is one of those conditions in which we would expect increased benefit by passing the current to the patient through hands of two healthy persons. It may be repeated from one to five or six times a day. [See N. Y. Lancet, vol. 2, p. 30; Lond. Lan., vol. 12, pp. 251, 327; Braith. Ret. No. 5, p. 115. Channing, p. 177.

ANGINA PECTORIS.

From the knowledge we have of this truly distressing malady, and our experience in controlling spasm with Magnetism or Electricity, we can assure the happiest results, from its immediate application in the paroxysm, and its daily continuance until all fear of its return is past. In all cases that I have had occasion to treat, I could observe a strong rheumatic habit of body, and hence I infer, that it is or may be inferred to be rheumatic in character, and of course should be completely under the control of this agent. I should prescribe it in the paroxysm with entire confidence of producing immediate relief, and firm expectation of an entire removal of it, by a continuance of its use, accompanied by such remedies as the general condition of each case might indicate.

I should use the agent under as strong a power as the patient could bear, by placing one pole in the hands of the patient or on the nape of the neck, or on the spine, about between the lower part of the shoulder blades and the other pole all over the front and lower part of the chest, around from side to side, by the lower edge of the ribs and perhaps over the heart, beginning with a moderate power, and increasing it to that degree of strength that can well be borne, and continue it for some little time after the spasm has ceased, it may be well to

pass the current over the chest, through the hand of an assistant. A person known to be subject to this complaint should never be without a machine of this kind at their command. [See Channing on Medical Electricity, p. 123.]

STRANGULATED HERNIA.

In Strangulated Hernia, which is one of those formidable surgical diseases, not unfrequently attended with loss of life to the patient, or requiring an operation that opens into a large cavity of the body, which operation, in itself somewhat dangerous, independent of the state of the bowel, may be entirely done away with by an early application of Magnetic-Electricity before the part becomes highly inflamed and adhesions take place between the bowel and surrounding parts, by exciting the muscular contractions of the bowels surely and strongly, by which means it reduces itself, and it would succeed many times, when other means had failed. The earlier it was used after the rupture took place, the more sure and readily would it succeed, and require no handling of the part, by which it would be irritated. In Strangulated Hernia which has been relieved by operation, the bowel is sometimes found in, or approaching to, a mortified or gangrenous state, which if not immediately relieved, is fatal after operation. In this state of things, there is not so powerful and certain remedy as Magnetic-Electricity to impart and restore life in the intestine, if applied directly to and about the part. [Lond. Lan. vol. 6, p. 274.]

PASSAGE OF GALL STONES from the gall bladder would be facilitated by controlling the spasms, and strictures from spasms, in the same way—also stone from the kidneys through the ureters into the bladder, would be rendered much less painful.

INTUSSUSCEPTION, OR INVAGINATED BOWEL—A condition almost necessarily fatal if not relieved, would be relieved by the action of a current of Magnetic-Electricity through the bowels. [See Braith. Ret. No. 21, art. 58 ; N. Y. Dissector, vol. 2, p. 52.]

MODE OF USE IN HERNIA.—We pass a strong current from the mouth or pit of the stomach, to the anus, and from

side to side contiguous to the strangulated bowel, and continue it until the bowel retracts, which would probably be in from one to twenty minutes. In the passage of Gall Stones, we would pass it as nearly through the affected part as possible, from side to side, and from front to rear over the gall bladder.

In NEURALGIA we shall say nothing of other remedies to be given or recommended, as it occurs in so many forms and complications, that it would require a volume of itself to give them all, and as this form of disease is readily recognized, it can require no description. The promptness of the cure may depend much on the judicious selection of other remedies, though we think that eight or nine times out of ten in all cases of simple Neuralgia, disconnected with other disease or any strong functional derangement, it will be cured, decidedly, and promptly, without any other remedy than Medical Magnetism. Indeed, under the above circumstances, we have met with but one case out of hundreds thus treated, but what we have succeeded in allaying nearly or quite all the pain the first time. It may be repeated as the pain returns.

MODE OF APPLICATION—We use or direct the use of the machine in Neuralgia thus: by giving one pole from the machine into both hands of the patient, taking the other in one of our own, apply our other hand over the diseased part, and continue it until relieved or greatly mitigated, and repeat it on the return of symptoms. [See Braith. Ret. No. 4, p. 62; No. 5, p. 63; No. 17, art. 23; N. Y. Dissector, vol. 4, pp. 107, 182, 188; Channing on Medical Electricity, p. 106; Smee. Elec. Biol. pp. 131, 132.

GASTRALGIA, OR PAIN IN THE STOMACH—The same mode of using the machine, and remarks, are applicable to this form of disease, but we confine our hand to the region of the stomach, and sometimes put the other pole on the spine opposite the stomach. We may use both poles directly applied to the person, but it is not as agreeable to the patient. [See N. Y. Dissector, vol. 4, p. 188.

ODONTALGIA, OR TOOTHACHE—We have never found a case of toothache we could not relieve, and when it is purely nervous or neuralgic, we always cure it. If the tooth be very badly inflamed and ulcerated at the root, the pain will quite likely return in a greater or less degree, in which case you may repeat the operation.

MODE OF APPLYING—We give the patient one pole in both hands and take the other in our own, and under a weak

power of the machine, take the painful tooth between our fingers and thumb, trying not to touch other parts, as the lips, &c., and continue till relieved, and if there be a soreness left we pass the current through our hand into the side of the face until it be removed.

TIC DOULOUREUX, OR NEURALGIA OF THE FACE.—The same general remarks are also here applicable that were made under the head Neuralgia and the modifications of application are only in the point of strength of current to be used, as, if the pain be near the region of or over the brain the current should be made very weak, and applied through the hand of the operator. We have thought that in all forms of Neuralgia we may gain some advantage by wetting the surface over the pain with some strong Anodyne Lotion as Morphine or the like when we applied the current.

SCIATICA, OR NEURALGIA IN THE HIP—General remarks the same as under Neuralgia, and the same general principle of application, only here you can use a good power of current, and can apply the wet sponge of the pole directly to the part.

HEMICRANIA, OR NERVOUS HEADACHE—In the application of Magneto-Electricity to this form and location of disease we always expect to give speedy relief, and the modifications are to begin with the current at the weakest point, and apply it through the hand, first wetting the hair through to the scalp with water, vinegar, or cologne as may be preferred.

PERIODICAL AND SICK HEADACHE—In the first approach of symptoms of this form of headache we should expect to arrest its advance for the time only, but after nausea has commenced we should hope for only a temporary mitigation. In Periodical Headache we should expect to cure it promptly by giving in conjunction the tincture of *Nux Vomica*. General rules of application same as above.

RHEUMATISM.

The author is not aware of a remedy for any disease that comes as near being a specific, as Magnetic-Electricity for Rheumatism. It is true that no good physician will ever think of treating it, in the acute or chronic form, without giving proper attention to the secretions of the liver and kidneys. The

author never saw a case yet, of either form of Rheumatism, but the secretions of both those organs were either bad in quantity or quality, and most always in both; not that rheumatism consists in those derangements, but that they always accompany it.

In acute Rheumatism, after the high febrile symptoms have subsided, or are modified, we come in with Magnetism, and in every instance have quieted at once, all those painful and distressing symptoms that are so urgent at times.

In a case of metastasis of the disease to the heart, where it was so severe as to threaten the life of the patient every moment, and he could not speak or whisper to be understood, with his lips cold and livid, we relieved him in half an hour so that he could talk, was easy and inclined to sleep.

In fact we have not in many years had a case of rheumatism of any form, however severe, last longer than from three to six days, and never lost a patient with it.

In these cases, although we use other remedies, we shall not speak of them here, but only explain the use of Magnetic-Electricity. In the acute or inflammatory form of the disease, we have always used it, by passing the current through one hand of an assistant, by giving him a pole in one hand and putting his other on the nape of the neck, and keeping it there, and on the whole track of the spine, while we, with a pole in one hand, pass our other hand over all the seats of pain wherever they are, and continue it until relieved, and then finish by carrying our hand all over the limbs and person.

In chronic rheumatism, we sometimes give the patient one pole in both hands, and apply the wet sponge of the other directly to the painful part or lame joint, and continue it until relieved in both instances, and repeat it on any return of symptoms. We often finish, in the latter form, by passing the current through our hands to the patient, and stop when he is relieved. [See Braith. Ret. part 3, p. 24; part 17, art. 158; N. Y. Dissector, vol. 4, p. 182; Smee. Elec. Biol, pp. 126, 127; Channing on Medical Electricity, pp. 114, 139, 142.

GOUT—In Gout, as in Rheumatism, the practice in the use of the machine would be the same, only we might put the foot and one pole of the machine into a bath of warm water. [See Channing on Medical Electricity, p. 142.

LABOR, OR PARTURITION.

Perhaps there is no remedy which comes more safely and promptly to the aid of the physician than Magnetic-Electricity in a lingering, protracted labor, where the pains are ineffectual, irregular and without their proper expulsive force. This state of things exists sometimes from general debility, nervous irritability or an over distention of the womb, and when the practitioner is satisfied that there are no hindrances to the progress of labor, other than irregular and inefficient pains or want of physical power in his patient, he has a sure, prompt, and safe remedy in this agent, and its perfect control over flooding after labor, and its almost certain power to resuscitate children apparently dead when born, make it an apparatus entirely indispensable to the practitioner, as there is, and can be no substitute for it. It is harmless and not unpleasant in its action, and far better than drugs.

MODE OF USE—Under a feeble power of the machine, it may be applied by putting one wet sponge, or the hand of an assistant, to the lower part of the spine, where the pain is felt in the back, and the other over the pubes, or front and lower part of the abdomen and to the perineum, and the power may be gradually increased to the necessary extent; it may be proper to avoid passing a strong current through the head of the child, and there is no need of it; it may also be passed over the upper part of the womb or uterus, and regular, efficient, expulsive pains will immediately come on, it may be continued or repeated as the case requires.

See Lond. Lan. vol. 1, 1845, p. 352; vol. 10, p. 291; Braith. Ret. No. 13, art. 185; No. 14, art. 165; No. 13, art. 188; Channing on Medical Electricity, p. 137.

CHLOROSIS, OR BLOODLESSNESS.—As this is depending on an impoverished condition of the blood, and may result from loss of blood, chronic disease of long standing, suspended functions, &c., it is always attended with enfeebled vitality and imperfect nutrition, and Magnetic-Electricity, being the most direct and efficient mode of supplying that deficiency, is of course among the best means to be used, accompanied with such remedies as are tonic, and will restore function. Mode of using the machine in this case would be quite general. The patient may hold one pole in each hand, and by the help of an assistant, through one hand, pass it over the stomach, lungs, bowels, &c., and over any organs whose action may be de-

ranged. It may be continued from ten to twenty-five minutes and repeated daily. Our efforts with this agent in this behalf have been successful.

CHORIA, OR ST. VITUS' DANCE, (MEGRIMS.)

Our success in the treatment of this complaint with Magnetic-Electricity has been entirely satisfactory, and in no case have we been disappointed in its results. It gives comparative relief almost from the first, if we can get the patient's mind quiet and free from apprehension. We always combine it with such remedies as the case may seem to require otherwise, and tonics, but *never* with the *common anodynes* and *narcotics*.

MODE OF USING THE MACHINE—We give the patient one pole in both hands, and with the other in one of ours, under a moderate or light power of the machine, we apply our other hand to the whole length of the spine, chest, stomach and abdomen, and finish by putting both feet into a warm bath with the pole we held. In a very bad case in a delicate person, we should prefer doing the whole through the hands of the operator and an assistant. It may be continued from a quarter to half an hour, and repeated daily. [See Braith. Ret. No. 3, p. 22; No. 16, art. 30, N. Y. Dissector, vol. 4, p. 503.]

CATALEPSY—In this as in all other forms of suspended functions of voluntary or organic life, we are to expect the same result from the use of Magnetic-Electricity, and the same rules for using the machine as are given under the head of Asphyxia from an Over Dose of Opium, only in this case you would avoid strong shocks, as not necessary. One pole applied to the nape of the neck, and the other over the stomach and to the soles of the feet, will, doubtless, be sufficient. [See N. Y. Lan. vol. 2, p. 347; Lond. Lan. vol. 2, 1851, p. 101; Braith. Ret No. 22, p. 90.]

STERILITY AND IMPOTENCE.—In many cases of Sterility, where it was owing to the absence of physical power and vitality of the organs, with a feeble state of health, we have always succeeded in restoring tone, and with it, fruitfulness; and the same results have attended our efforts in Impotence from any cause, being the same in character.

MODE OF USING MACHINE.—The objects to be accomplished

in the two forms of disease here mentioned, are both general and local ; general, to give, vitality and physical force, and local as respects the organs particularly involved, and may be left to the judgment of the operator, being governed by general principles. [See N. Y. Lancet, vol. 3, p. 34 ; London Lancet, vol. 9, p. 291, vol. 11, p. 20 ; vol. 1, 1851, p. 60.

DIABETES.

In all functional derangements of important organs, that are not inflammatory, but chronic in character, and when no organic change exists in the part affected, we may expect a prompt and decisive improvement in the performance of the function of the nerves of the diseased organ, and if there be no change of structure, we may expect a speedy cure. We have reason to expect also an improved performance of function, even if there be some change of structure, but not so certainly a cure. The action of this agent also will increase and make more certain the action of other remedies. This remedy will secure a change in the chemical constituents of the urine. The mode of using the Machine, is to apply the current directly through the kidneys, across the small of the back, and above the hips. We finish the operation by putting one pole into both of the patient's hands, and taking the other pole into one of our hands, we apply our other hand to the region affected. The whole operation occupying from fifteen to twenty-five minutes. Applied daily.

BRIGHTS DISEASE OF THE KIDNEYS.

In this complaint, at the present time considered very formidable, much is to be expected from the action of Electricity from the Magnetic Machine, in giving tone and healthy energy to the nerves of the organs principally affected, to restore them to healthy action, and the urine to its natural chemical constituents. The same general remarks in regard to the complaint and the manner of using the machine are applicable here, that were made under the head of Diabetes.

AMAUROSIS—GUTTA-SERENA—PALSY OF THE OPTIC NERVE.

In the above conditions of the eye, and the optic nerve, the author has been extremely gratified by the effect of Magnetic-Electricity in many instances, where vision was more or less imperfect, in the ready and constant improvement of the patient until vision was restored. When there is no organic change in the organ, and especially where its condition is sympathetic with disease in another organ, we can speak with the utmost confidence of success.

THE MODE OF USING THE MACHINE, adopted by us, is to place one pole in both hands of the patient, having the other pole in one hand, place our other hand, moistened, over the diseased eye, under a comfortably strong power of the machine. This should be continued from fifteen to twenty-five minutes, and repeated daily. There is also an instrument made for the special purpose. [See Braith Ret. No. 5, pp. 53, 64.

ULCERS.

In all the varieties of indolent Ulcers, sometimes called cold Ulcers, we have an invaluable assistant and auxiliary to their cure in Magnetic-Electricity, which is used to stimulate them to healthy action. In speaking of this remedy in connection with the treatment of ulcers we need make no distinction in kind or character, save that of chronic or indolent ulcers, and those of a specific character as Syphilis and Buboes, Nodes, &c., and such as Malignant or Cancerous—these all come under this head, where it is desired to stimulate them, in order to promote a more healthy action in the part affected.

Another distinction may be made so as to include all irritable ulcers, that is, such as are very sensitive to touch, and also those that are sometimes found as a sequel to phlegmasiadolens when badly treated, or of indifferently treated bilious fever, when the kidneys and liver have been neglected, and the limbs becomes swelled and dropsical. In such cases the practitioner will find in this agent an invaluable remedy.

THE MODE OF USING THE MACHINE, that the author has found most agreeable, as well as successful, is, to give into both hands of the patient one of the poles, and if there be a

tendency to coldness in the limb, or part on which the ulcer exists, we would put it into warm water, with one pole from the machine in the bath, until the limb becomes warm, when we would remove it, and cover the ulcer with a pledget of lint, or a very soft sponge, or cotton wool wet, and under as strong a power as the patient can well bear, we would apply the pole directly to, and round about the ulcer, from fifteen to twenty-five minutes, once a day. In very irritable ulcers it is frequently the case that one application of a machine that is arranged magnetically, will remove nearly or quite all the pain and soreness. It will, no doubt, be better, when it can be done, to apply it to the ulcer through the hand of the operator.

SYPHILIS.

In primary Syphilis we are not aware of the utility of Magnetic-Electricity, until a Bubo, or Abscess makes its appearance, when it will be found a very prompt agent in dispersing them. We should try it on a primary chancre in the manner recommended under the head of ulcers.

SYPHILITIC NODES on long bones, and the thickening of the flat bones, in tertiary Syphilis.—The author has had remarkable success in dispersing them, together with the pains that accompany them, by the use of this agent. We have dispersed the thickening on the lower edge of the scapula in a months time that was an inch thick.

SYPHILITIC RHEUMATISM AND NEURALGIA.—These are two forms of disease that accompany, in peculiar constitutions, chronic syphilis, that are extremely distressing to the patient, and in the absence of the ulcers and nodes which may be present or not, they are liable to be confounded with Neuralgia and Rheumatism that have nothing to do with Syphilis, which can be learned by the history of the case, and we are not acquainted with so powerful and efficient an auxiliary in the treatment of any of the forms of disease here spoken of, as Magnetic-Electricity, especially in the Nodes, Rheumatism and Neuralgia, bringing very prompt relief, and assisting also the other remedies to act with much more efficiency.

THE APPLICATION OF THE MACHINE.—In the above complaints where ulcers or buboes are present, it should be used as described under Ulcers. In Buboes it may be used directly

to and through the part, and if ulceration, or the formation of matter or pus takes place, it will, probably, disperse it, and tend to bring about a speedy termination in that way. For the Rheumatic and Neuralgic symptoms of Chronic Syphilis, you would apply the machine in the way and manner described under the heads Rheumatism and Neuralgia.

We never rely solely on Magnetic-Electricity for the treatment or cure of any of the forms of Syphilis in any of its stages. It will, however, disperse the Neuralgic pains, and Rheumatic symptoms, alone, but they will return if the disease be not cured.

FISTULA IN ANO AND PERINEUM, OR SCROFULOUS ABSCCESS IN OR ABOUT THE RECTUM.

The author has succeeded in affecting a cure of this complaint by means of Magnetic-Electricity, when all other efforts had failed. One of the cases had been the subject of surgical operations, for a cure, and it had broken out again, in which we effected a cure, now five years since, and it has never returned. In another case it is four years since the cure, and no return, though there were symptoms of it at one time, and the use of the machine dispersed them again.

MODE OF USING THE MACHINE, is, to hold a pole in each hand of the patient for a space of ten minutes for its general effect on the system, and then apply the poles directly to, and around the part in different directions for ten or twenty minutes at a time, once a day, as directed in case of Piles.

ABDOMINAL DISTENTION, FLATULENCY, ENLARGED ABDOMEN, AS IN TABIES MESSENERICA.

In all cases of Abdominal Distention and Flatulency from indigestion and like causes, Magnetic-Electricity will be found a sure and prompt remedy, daily applied, or as often as the gas shall accumulate, if it be two or three times a day.

TABIES MESSENERICA.—It will be found to exercise the same control over this grave and distressing malady of chil-

dren and infants, and an auxiliary to other remedies, used once or twice a day through the hands of two healthy persons, each one holding a pole in one hand and placing the other on, over and all about the abdomen, and from the spine to the bowels under as strong a power of the machine as can be borne comfortably. For Abdominal Distension and Flatulency it should be used in the same manner as above, only it is not necessary to use it through the hands of other persons, unless the patient be a child.

CONSTIPATION.

In this complaint, when it arises from a sluggish, cold, and an inactive state of the system, there is not a more efficient and perfect remedy in our possession. We have often had it produce the desired effect (a free evacuation of the bowels) in from fifteen to thirty minutes.

The physician will suggest such other administration of medicines as each case may require.

MODE OF USING THE MACHINE.—In this condition of the system, we put one pole into the mouth, or apply it to the pit of the stomach, and pass the other pole over the bowels, more particularly the lower portion, and even to the fundament, or lower end of the bowel, from fifteen to twenty minutes, under as strong a power of the machine as can be well borne by the patient. Repeat it every day, and continue it from twenty to thirty minutes at each time. [Braith. Ret. No. 21, art. 64.]

DELIRIUM TREMENS.

In this form of disease, or nervous aberration, the author has derived much benefit from the use of Magnetic-Electricity in quieting the distressing state of nervous and mental excitability, which if not removed, harasses the patient to death.

It operates by giving tone to the nervous function, and should be applied one, two, or three times a day, as the urgency of the symptoms may require, and continued at each time until a degree of mental and bodily quiet is restored. Through the hands of an assistant, the operator may apply it to the

head and all parts of the body. Let the assistant, holding a pole in one hand, place his other hand on the head, which should be wet with water. The operator taking the other pole in one hand should, with a weak electrical current, pass the other hand, over the spine, chest, bowels and limbs from fifteen to thirty minutes. The assistant should also pass his hand from the top of the head to the nape of the neck. With the power of the machine made as strong as all the parties can bear, the operation may be continued by the operator, passing his hand again over the same regions as before, except the head, for about the same length of time.

THE HABIT OF OPIUM EATING AND LIQUOR DRINKING.

The author has repeatedly succeeded in assisting those persons who were unfortunately addicted to these habits, to overcome them in a manner in which the distress and suffering are much alleviated, and a return of health and former vigor established. It is essential to success, that the patient should second your efforts, and abstain entirely from either Opium or Liquor, and our efforts, with this agent, (Magnetic-Electricity) is to relieve that excessive nervous prostration, and anxious longing for the accustomed stimulus, (which constitutes the principal suffering of the patient, and makes them for a time maniacs,) by supplying in an artificial way, a healthy, nervous power, and in a measure to give them a healthy stimulant. In this manner the habit and necessity is overcome.

MODE OF USING THE MACHINE.—It should be used precisely as was directed for Delirium Tremens. In these cases it is better for the current to pass through the hands of two healthy persons, and the machine may, if needed, be used from one to three times in twenty-four hours.

HICCOUGH.

This complaint though ordinarily of no moment, as it is generally slight and of short duration, in some instances is pro-

tracted and harrassing, and becomes even a serious and grave circumstance, requiring the attention and attendance of the physician. We have always found it to yield readily and promptly to the use of Magnetic-Electricity, applied by placing one pole on the nape of the neck, or in both hands of the patient, and passing the other pole over the region of the diaphragm. It may be applied directly or through the hand.

HYPERTROPHY.

The author has used Magnetic-Electricity in cases of an apparent congenital Hypertrophy with other means, such as pressure, and with some degree of success. Those conditions of thickening and induration that occur in some forms of chronic disease, all readily yield to the application of this agent. We should never omit a trial of it. We should try a direct current without a shock, if the ordinary arrangement of interrupted to-and-fro current does not succeed. The shocks in this form are of no consequence.

GOITRE.—We have succeeded in treating many cases of Goitre with success, and have always used the interrupted current, and used both poles on the affected part at the base, passing the current through it in all directions, every day, or oftener, from twenty to twenty-five minutes.

SECALE CORNUTUM, OR HORNED RYE.

This justly celebrated remedy, which given in small and repeated doses, in slow and protracted labors, where there are inefficient uterine contractions, is, in the author's opinion, perfectly free from harm to the mother or child, may now be entirely laid aside by the use of a mild current of Magnetic-Electricity, directed as described under the head of Labor. Those physicians who have feared, and those families who do fear the action of Ergot, or Horned Rye, may be relieved of any apprehension on those points. Those physicians who have been, and are in the habit of using Chloroform in tedious, difficult, and protracted labors, have a sure and perfect remedy for an over dose of Chloroform in Magnetic-Electricity, if they have

it at hand to apply immediately, as described under Chloroform.

PURPURA, PURPURA HÆMORRHAGICA, SEA AND LAND SCURVY.

Under the above head, authors have described diseases that have received names in accordance with their fancy or judgment, which descriptions and names we omit, because so far as Magnetic treatment is concerned, it would be the same in mode, as one general condition exists in all—the loss of all the vital forces, and energy of functions, and is characterized by great physical debility and imperfect nutrition.

Purpura is characterized by spots or patches, like flea or insect bites, and sometimes dark livid spots. Sometimes those livid spots throw out pale or thin blood that does not coagulate.

Scurvy is called Land or Sea scurvy as the case may be, whether contracted on land or sea.

In the above forms of disease the author knows there cannot be a more efficient means in the hand of the physician than Magnetic-Electricity, to overcome debility, by imparting tone and energy to the nervous system, promoting digestion, also the circulation of the air through the lungs, and blood through the vessels, and give more efficiency and certainty to the action of other remedies.

The current should be applied in general over the system, and it would be better if used through the hands of two healthy persons.

Let one person, holding one pole in one hand, place his other on the back of the neck, and the other person with one pole in one of his hands, pass the other hand over the chest, stomach, bowels and limbs, while the application of the pole on the neck may be kept opposite on the spine, while the other hand is passing over the body, and when the hand is going over the limbs, let the other pole or hand return to the nape of the neck. Let it be done under as much power of the machine as can be well borne, and repeated once or more times a day, and continued until health or vigor is restored. We do not believe scurvy can appear in a person, who will daily use this machine, holding one pole in each hand every day fifteen minutes.

CALCULUS, OR STONE IN THE BLADDER.

In Calculus, or Stone in the Bladder, Galvanism, or the primary current from the battery, has enjoyed something of a reputation as a chemical solvent, and there are too many well authenticated cases from reputable sources longer to doubt, but that some forms of stone will yield to its action. In this, as in most other chemical and surgical cases, a direct and uninterrupted current (i. e. a current without any shocks,) is what is desired. It may be obtained from a Magneto-Electric machine made on purpose, or from a battery; either of which will affect the object. It is only in surgical and chemical cases that this form of machine is to be desired.

MODE OF APPLICATION.—In all cases where we wish to use a direct and uninterrupted current without any shock, we can use it much stronger than if the same current gave shocks. We should proceed by introducing a long, insulated conductor into the bladder, and if we could do so, we should apply it to and confine it against the stone. If then the other pole be put over the pubes or on the sacrum, and continued there more or less steadily for several days, the stone will be found to crumble and readily to break down. It is not probable that all forms of stone would yield to this process. [N. Y. Dissector, vol. 2, p. 38; Lond. Lan. vol. 2, p. 581.]

UN-UNITED FRACTURES.

It is now quite well established by experiments in this country and Europe, that a current from a Battery or Magneto-Electric machine, will induce a deposit of ossific matter. An uninterrupted current may be best in this case, but it should be Magnetic, and may be passed directly through the limb, transversely and lengthwise, once a day, an hour or two at a time. [N. Y. Dissector, vol. 4, p. 31.]

RACHITIS, OR RICKETS—MOLLITES OSSIUM, OR SOFTENING OF BONES—FRAGILITAS OSSIUM, OR HARDENING OF BONES.

As Rickets is purely a scrofulous disease, resulting from deficient vitality and nutrition, it is evident that Magnetic-Electricity is strongly indicated, and has proved with us, highly

useful as an invigorating, restorative agent, and it makes other tonics much more efficient. Molites Ossium, though somewhat different in character, is, nevertheless, a condition of faulty nutrition and loss of harmony and motive force in the vital functions, and involves a similar, general principle in treatment. Fragilitas Ossium is another aberration of the due performance of the vital functions, and will be much improved by this agent, in restoring integrity. The mode of using the machine in these forms of disease, is to apply the poles in general, over all the vital functions, and in the two first, it would be best, to pass the current through the hand of a healthy assistant, directly through from the spine to the front of the body, and, probably, this would be best in all three.

APHONIA, OR LOSS OF VOICE.

In this complaint which is so embarrassing to those who are the principal subjects of it, (singers and public speakers for the most part, though any one may have it from cold,) we have a very ready and prompt remedy in Magnetic-Electricity, and in this, as in all similar cases, our prompt relief depends much on the early application of the means, and there should be no delay, not that we cannot cure if there be delay, but it can often be cured with one or two applications early, while delay may cause it to be much more protracted.

MODE OF USING THE MACHINE.—We place one pole in both hands of the patient, and take the other in one of our own, and with our other hand, pass the current in all directions through and over the throat, (and we may apply our pole directly to it) once or twice a day, from fifteen to twenty-five minutes until the voice be restored. [Braith. Ret. No. 8, p. 76; No. 17, art. 28; N. Y. Dissector, vol. 1, p. 108.]

RHEUMATIC PERICARDITIS, OR RHEUMATISM OF OR ABOUT THE HEART.

This is a complaint that anybody may have who has Rheumatism of any form, but especially acute or inflammatory Rheumatism—and very often inflammatory Rheumatism which

is seated in the limbs, may undergo a sudden translation to the fibrous tissues of and about the heart, creating suddenly great distress, alarming symptoms, and immediate danger, if not at once relieved, which always has been in very numerous instances in our hands in half an hour's time, by the use of Magnetic-Electricity. We have never seen this form or location of Rheumatism, except it was connected with general Inflammatory Rheumatism. The ordinary remedies do not control it alone, but if assisted by Magnetic-Electricity properly applied, it is at once dispersed. [Lond. Lan. vol. 1, 1852, p. 140 ; Braith. Ret. No. 14, art. 27 ; N. Y. Dissector, vol. 3, p. 185.

MODE OF USING THE MACHINE.—We give the patient one pole in both his hands, or apply it to the nape of the neck, and the other taken in one of our hands, and apply the other hand under as strong a power of the machine as can be well borne in the region of the heart, chest, and diaphragm, until the symptoms subside, and repeat once a day or as often as the symptoms occur, if it be two or three times a day, and we have never known it fail to relieve the case at once, and cure all these symptoms in two or three days.

MUSCULAR CONTRACTIONS.

There are a great variety of forms of Muscular Contractions, or many localities where the contractions have taken place, and hence some have bestowed names to them according to location, as wry neck, &c., and they all cause more or less deformity to the person of the patient wherever they occur, and great inability of the part. They are often from a palsy of the opposing muscle. We have succeeded in curing them, without cutting them at all, for several years, and find those cures are best, as there is no injury done to the muscle, and never confines the patient ; as this is a matter for the surgeon or physician only, ever to attempt, each one will select his own mode of operating as the case under consideration may dictate with the Magnetic machine. [See Braith. Ret. No. 4, p. 53 ; N. Y. Dissector, vol. 4, pp. 139, 204.

ANCHYLOSIS OR STIFF JOINTS.—When stiff joints occur from Contracted Muscles, as of the knee, elbow, and ankle joint, as it sometimes does, it is always the subject of succes-

ful treatment in this way, and in all instances where it can be done, is so infinitely better than by cutting the tendons, that they have no comparison. Here, too, the Surgeon will be dictated in his use as to the manner of applying the Magnetic machine, by his own judgment of each case. [See Braith. Ret. No. 4, p. 110.]

DROPSY.

The author is not aware of any condition in which Dropsy of any form exists, that will not be largely benefitted by the daily application of Magnetic-Electricity, to facilitate directly absorption of the effused fluid, and promote the action of remedies administered. In local Dropsies, as in Hydrocele, Dropsies of the Joints, &c., it often proves in our hands a remedy by itself, with no medicine. We know of no circumstance to contra-indicate its use, unless it be fever or inflammation. Mode of application of the the machine, must be directed by the judgment of the physician in each case at the time. When we wish simply to promote the action of other remedies, holding one pole in each hand will be sufficient, and when we wish to promote local absorption, we would pass the current directly through the part, in different directions. In anasarca swellings of the limbs, we apply it to the limb, part of the time the patient holds one pole in both hands, and a part both poles are applied to the limb.

APOPLEXY.

In all conditions of effused fluid, whether of blood in the brain, or serum in the cavities, great assistance will be obtained from the use of Magnetic-Electricity, to produce speedy absorption. Whether there be symptoms of Paralysis or not, following after Apoplexy, we are to derive great benefit from the use of this agent, in producing speedy absorption of effused fluid.

THE MODE OF APPLYING THE MACHINE, will be by wetting the hair of the head to the skin, and then applying the poles directly to the head, through the hand, by two persons, each

taking a pole in one hand, and applying their other hand to the head on the opposite sides of the brain, under the weakest power of the machine to begin with, and then increase it to what the patient can bear. It may be repeated two or three times a day from fifteen to twenty minutes at a time. [See Braith. Ret. No. 18, art. 24 and 25.

PALSY, OR PARALYSIS—LOSS OF MOTION OR SENSATION, OR BOTH, IN ANY PART.

There are so many forms of the above complaint, and authors have been fond of giving them names according to their location, sensation, or motion, that although we may retain the names to save confusion, the same principle of treatment is to be followed, and when there are any modifications to be observed, we will note them. We shall proceed to speak of the treatment in detail, under the names as applied to forms and locations, and shall give the mode of application under a general head for all forms, and shall also speak of any preferred mode in any particular form.

We do not deem it necessary to speak of the causes of Paralysis, except so far as names are applied to it, believing that all will know that they have some form of the above complaint, when they have lost either sensation, motion, taste, smell, seeing, hearing, or loss of power over the evacuations of the body, &c, &c. We do not, here, feel called upon to give a characteristic description, nor need we say much about the general consent throughout the world of the best and most intelligent men in the profession, that Electricity in some form is the best, and, in many instances, the *only remedy*, now relied upon for the treatment of *any form of palsy*. It has been and is still, one of those special subjects that have daily engaged the attention of the author for many years, and with a degree of success surpassing all former conceptions of the power of the agent in this very troublesome complaint. We also feel bound to say that if *anybody* has used it, without any considerable degree of success, the *fault* is either in their *manner of applying it*, the character of *their machine*, (which is of all importance,) or *want of perseverance*. Thus, much, we are able

to say without regard to the age of the patient, or the cause of Paralysis; at the same time we would not be understood to say, that *all cases*, can be perfectly cured, but they have been in our hands benefitted to a greater or less extent; and we have used the machine on cases of from three days to fifteen years standing, and have always either cured, or decidedly benefitted the case. Where the Palsy arose from blows, or mechanical injury to the nerve, we have not been disappointed in obtaining some degree of success.

PALSY OF THE FACE, OR ONE SIDE OF THE FACE.—We have treated many cases of this form of Palsy, and have never failed in curing them (if very recent) in from three to seven applications of the Magnetic-Machine; and if of several months standing, from one to two weeks daily application has been sufficient, when it did not arise from mechanical injury—with no other remedies.

PARALYSIS AGITANS, OR SHAKING PALSY.

This disease is characterized by a constant shaking and unsteady agitation of the head, or limbs; and in the attempted movements of the person, the power to move, and the direction of the motion are very uncertain, as the mind or will has a very inconstant control over all of the voluntary motions of the limbs and body.

THE MODE OF USING THE MACHINE.—In this form of Palsy, one pole should be held in one hand of an assistant, who should place his other hand on the top of the back part of the head, or on the nape of the neck of the diseased person. The other pole should be in the hand of the operator, who, with his other hand, should pass the current over the chest, stomach, bowels, limbs and spine, once a day from twenty to thirty minutes at a time.

HYSTERICAL PALSY.—It is a matter well established that this form of Palsy yields readily to the Magnetic treatment, with such other remedies as each case may indicate. *The mode of using the machine* will be governed by the general principles as to the location of the Paralysis, and in all recent cases the physician is to expect entire and prompt success. [See Braith. Ret. No. 21, art. 27, 28.]

PALSY OF A HAND, ARM, LEG, OR A WHOLE SIDE.

In Palsy of a hand only, or the lower part of the leg, as it occurs in children from one to three years old from the irritation of teething, joined to the tendency to irritation of the bowels at this period of life, and hot weather, we have always succeeded in curing, when the case was recent, whether the brain was involved or not, without any medicine. These are the cases out of which many or all of the deformities of the feet and hands grow, that were not on the child when born, and to these cases we have devoted our principal attention since we have been in the practice of treating deformities. These deformities come by neglecting to cure the Palsy when it comes, and these we cure without cutting the tendons better than any man can do, by cutting them. These Palsies and Deformities may follow after an attack of any severe illness, as of scarlet or other fever, fits from worms, teething, dysentery, diarrhœa, cholera infantum, &c., &c.

Palsy of the above kind and location may appear in youth and adult life, but then the cause is different, as from standing in cold water, undue pressure over a nerve, &c., and is equally easy of cure if taken in seasonable time. Indeed, in all forms of Palsy, the difficulty of cure arises much from neglect in bringing Magnetic-Electricity to bear early, and in temporizing with other means on which there is but little and a doubtful reliance to be placed. In all cases of neglect, there is either a permanent loss of power and use of the limb, or a deformity will follow, as one set of muscles are more perfectly paralyzed than the other.

GENERAL PALSY, or where the whole body, or a considerable portion of both sides are involved, as after a fit of apoplexy, or where a fall or blow, injuring the spine, has occurred, is a very serious and dangerous case. If the patient be not immediately destroyed, you have a right to place great hope and reliance for a perfect restoration, by resorting immediately to Magnetic-Electricity, to produce a prompt absorption of effused blood or fluid, and to restore a connection and harmony in the action of the oppressed nerves. The indications of treatment are all the same, if sensation and motion, or either of them are lost.

PAINTER'S PALSY.—The poisonous effects of lead upon the human system have long had the reputation of producing two forms of serious disease—Painter's Colic and Palsy, both of

which have been very successfully treated with Magnetic-Electricity, and we have no remembrance of failing in any instance.

INCONTINENCE OF URINE.—In children and many persons in adult life, the inability of holding their water, or its passing from them without their knowledge, is source of great misery and wretchedness, destroying all hopes of future happiness and comfort. With these means it is perfectly curable. We believe in all cases, so far as we have used it, it has proved so. As it is always owing either to a loss of nervous or muscular power or both, it will be seen that it comes directly and appropriately under these means, and should always be attended to early, before the habit becomes of long standing and the patient's hopes are shrouded in gloom and darkness. [See Braith. Ret. No. 9, art. 47.]

INABILITY TO HOLD THE CONTENTS OF THE BOWELS, is another form of a most distressing loss of power, and exists from like causes as the above, is subject to the same remarks, and is cured in like manner.

DEAFNESS, in some of its forms, is owing to a Paralysis of the auditory nerve, or nerve of hearing, and when this is its cause, it can most certainly be cured by these means if used in a proper manner.

IMPAIRED VISION, and sometimes Blindness is produced by a Palsy of the optic nerve, or nerve of sight, and when sight is thus lost, these are the legitimate means of restoration. We have had a remarkable case which will be detailed in another book, where both sight and hearing, from protracted chronic disease was much injured, and were both perfectly restored from the use of these means, together with the general health of the patient.

TREATMENT OF PALSY WITH MAGNETIC-ELECTRICITY.—We shall claim the right of speaking of this form of disease, as if there was no other remedy for it, for when compared with this, they all, without exception, sink into insignificance. We speak with knowledge on this subject, having the full test of years of experience. We shall also, here, take the liberty of repeating, that if others do not have the same or similar success, it must be owing to the faulty arrangement of the machine they use, their want of knowledge to apply it, or their lack of perseverance, for there is neither mystery or secret about it.

In the first place, we would say that, although in this form

of disease you are more likely to obtain a degree of benefit from the simple Electrical-Machine, or the Galvanic Battery, and it is the only cases where they are good for anything ; you are by no means to expect the same amount of relief, in double the time as you are from a properly constructed Electro-Magnetic machine, nor from any of *them*, as from a properly made Magneto-Electric machine. We are well aware that many who have written on this subject in Europe and America, have made statements differing from our own in some measure but they do not detail the success that we are able to do ; and we know that the distinction we make is, in many instances, entirely essential to success. We simply leave this matter here, by saying that the kind and form of machines described in this book, are the only ones entitled to confidence, unless they are constructed on exactly the same principles.

THE MODE OF USING THE MACHINE will be varied more by the location of the disease than by any other circumstance. In palsy of the lower extremity, we generally immerse the foot in warm water, and put one pole in the bath and the other should be held in the hands of the patient, or applied to the nape of the neck or spine and kept there. The foot should be retained in the bath from ten to twenty minutes, and the water kept at a temperature of from 95 to 100 Faenheit. Then on removing the foot or feet, if both are palsied, we wipe them and take the pole that was in the bath in one of our hands, the other pole being still held by the patient, we apply the current to the limb through the other hand for five or ten minutes until it is dry. We do the same if it be both or one limb that is palsied, and repeat it once a day or more under as strong a power of the machine as the patient can well bear.

IN PALSY OF THE FACE we give the patient one pole in both hands, having wet the sponge with which it is covered. The other sponge, also wet, may be applied directly to the face under a moderate power, but it is better if applied through the hand of a healthy person. The power may be increased to as much as the patient can well bear. It may be continued from fifteen to twenty-five minutes and repeated every day, or even twice a day.

IN PALSY OF THE HANDS AND FEET the same rules and principles will be observed.

In applying it for INCONTINENCE OF URINE we apply one pole the lower part of the spine, and the other placed low on the bowels immediately over the bladder under a moderate power,

and continue it until relieved. The pole used in front may be put entirely on the private parts over the urinary passage.

The Spasmodic Retention of Urine may be treated in the same way, so far as using the machine is concerned, as incontinance of urine.

In *Inability to hold the contents of the bowels* one pole of the machine should be applied on the small of the back, and the other on the lower end of the bowel, under a good power of the machine.

IN DEAFNESS *from a palsy of the nerve of hearing*, or auditory nerve, the patient should hold one pole in his hand, or it would be better to put it in his mouth, and we place a small conductor made on purpose in the ear, first putting in a small roll of cotton wool, wet, to diffuse the current, and we sometimes use it through ourself, and place one finger for a conductor in the ear.

In using it for IMPAIRED VISION, we always pass the current through the hand to the eye, whether it be blindness or impaired vision.

IN PALSY FROM LEAD the general rules and principles will be the same as in Palsy generally. [See Lond. Lan. vol. 12, p. 512; vol. 4, 1846, pp. 211, 328; Braith. Ret. No. 3, pp. 22, 23, 24, 25, 22; No. 5, p. 63; No. 4, p. 63; No. 9, p. 89; No. 16, p. 103; No. 13, p. 53; No. 14, p. 55; No. 21, pp. 85, 87.]

PHLEGMASIA DOLENS, OR MILK LEG.

The author has, in all cases, succeeded in relieving the swelling of the limbs in cases of this kind, with little trouble, compared with any other mode, after they have become chronic, or of long standing. Having, in our own practice, never had a single case but what we cured by other means, while they were acute or inflammatory, we cannot say what its action would be in this stage. In those cases of long standing, and where the limbs were dropsical, ulcerated, and varicose veins existed, with the ulcers very irritable and painful, we have succeeded in bringing perfect relief in a very reasonable time. We have always used other means in conjunction, such as bandages, frictions, and such as seemed to be indicated in each case.

SWELLED LIMBS AFTER FEVERS, that have been badly treated we have also succeeded in bringing to a healthy state, when ulcerated, dropsical, and having abscesses formed in them, such as other physicians, who did not use this agent, (or Magnetic-Electricity,) had told the patients that nothing but time could relieve, or they must be cripples for life. Indeed we have found comparatively no trouble in curing any of these cases, when we use this agent in conjunction with other means, such as bandages, friction, &c.

ELEPHANTIASIS.—We have never had a case of this kind to treat since we have been in the habit of using Magnetism, but have a great anxiety to try it. From what we know of its powers to promote healthy action in any part, we should look, with much confidence, for a favorable result, and will be much obliged to any physician who can favor us with an opportunity to do so, or that will use it himself, and send us a statement of its result.

THE MODE OF USING THE MACHINE, in the last three states, viz : Phlegmasia Dolens, Swelled Limbs after Fever, and Elephantiasis is so nearly the same that we shall describe them together. In all we use the foot bath of water at a temperature of 100 to 105 or 8° Fahrenheit, with an insulated bath conductor, by putting the foot or feet, and one pole from the machine into the bath, and the other pole held in both hands, keeping the water in the bath hot by adding warm or hot water occasionally for half an hour, and then remove the foot and wipe it well, and taking the pole from the bath in one hand, with the other hand rub the limb thoroughly all over, with the current passing through the hand to the limb.

Then we apply thorough friction by the hands to the limbs, and apply such medicine to the limb as we judge it needs, and lastly apply a roller or bandage well and properly, repeating the whole operation every day.

ERYSIPELAS.

In Erysipelas, in every form, the author has derived the most unequivocal benefit from the use of Magnetic-Electricity. In all the eruptive diseases, that are called varieties of Erysipelas, it has universally disappeared where this agent has been used with any degree of regularity, in connection with

various scrofulous diseases and conditions that have been the author's special practice, in some instances, without any other means, in others the patients were taking the Iodide of Manganese, or Iodureted Chloride of Gold, and some cases Arsenic. In Phlegmonous Erysipelas we should apply the current directly to the part, by the wet sponges on the poles, and we may give the patient one pole in his hand, and apply the other directly to the part, or through our own hand to the part, wetting the surface with salt and water, or muriate of Ammonia dissolved in water.

We should do the same in every eruption that was considered either Scrofulous or Erysipelatous, with confident expectations of a cure, other things being favorable. [See Channing p. 176.]

SALT RHEUM.

The author has succeeded in curing the worst case of Salt Rheum he ever saw, in five or six weeks, by the use of no other means than the Magnetic machine, used only on the spine and chest for a cure of curvature; and all the medicine that was given was to keep the child's bowels regular, give them good nourishing food and plenty of exercise, and twice a day a mixture of Arsenic, and the Iodureted Chloride of Gold, and now five years have elapsed without either a return of the Erysipelas or Deformity of the Spine.

We have had equal success with all eruptions that are either Erysipelatous or Scrofulous in character, and in the case above alluded to, it had been of seven years standing, and the child's linen and the bed linen would be stiff in places with blood, and stick to her person, and some joints could not be moved without starting the blood.

CATARRH.

In all forms of Catarrh, wherever located, we know not so efficient a remedy for it as Magnetic-Electricity, whether of the vagina, lungs or air passages, throat or nasal cavities, and in all cases where there has been a persevering effort made, it

has been attended with success, sometimes with, and at other times without any other remedy being used. Apply one pole directly to the part and hold the other in the hand.

STRAINS, SPRAINS AND BRUISES.

All physicians are well aware of the difficulties that often attend the restoration of a joint that has been sprained, as of the wrist or ankle, &c., and of the extreme difficulty of restoring efficient contractile power to muscles that have been strained from lifting or other violent exercise in the forearm or shoulder, and subsequently become inflamed, and as a consequence loose nearly all their contractile power.

We have always succeeded in restoring the muscles to their natural power in a very few days in the very worst cases we ever saw, and in those that are more mild, in two to four applications of the machine.

In Bruises two or three applications will generally remove all the effects of it, or the black and blue appearance.

MODE OF APPLYING THE MACHINE.—Apply both poles to the part in such a manner as to pass the current through it in all directions, during a part of the time of each application, and finish by giving the patient one pole in his hand, and we take the other pole, with one hand, and apply it directly to the part with our other hand. If there be a coldness of the foot or hand affected, we put it into a hot bath, and put one pole in the bath, and finish with our hand. [Channing, p. 188.]

AGUE AND FEVER.

In districts of country where Ague and Fever prevail, there is always much call for Medical Magnetism, on account of that low, cold and inactive state of the nervous, circulating systems, and deranged function that prevails. We do not offer it as a cure for Ague, but as a very important assistant in securing the action of other means and furnishing vitality, and assisting to restore function.

We do not think it worth much to arrest a chill after it has commenced, but if used an hour or more before the chill

should appear, it will do much to mitigate its severity, and oftentimes to avert it altogether.

In the early stages of Ague and Fever, it is most useful to promote and secure the efficiency of other medicine, but in cases of long standing in which there is a tendency to dropsy, ague-cake in the side, swelled limbs, &c., it is a powerful curative agent to give action, warmth and vitality to the system. [Channing, p. 138.]

MODE OF USING THE MACHINE.—The author when he wishes to avert the chill, about an hour and a half before the chill should appear, puts the feet of the patient into a hot bath, (say one hundred Farenheit) half way up to the knees, puts one pole into the bath, the bath to be kept hot by adding hot water often, and gives the other pole into both hands of the patient, sets the machine going with as much power as can well be borne, and lets it run half an hour or more, removes the patient from the bath, keeping the feet warm and dry, and the patient still in bed.

When we used it to dissipate dropsy, or ague-cakes in the side, we apply it more directly to the part, and we use it every day. [Channing, p. 137, 138.]

ONANISM, MASTURBATION, NOCTURNAL EMISSIONS, OR SELF POLLUTION.

In the above conditions, so surely destructive and ruinous to both body and mind of the patient, the author has great reason to be satisfied with the result of Magnetic-Electricity, used to give a natural tone and vigor to enfeebled and debilitated organs, and allay the morbid excitement which will, inevitably, sooner or later, induce a kind of insanity, and bring on other fatal diseases, as consumption, idiocy, &c., if not at once arrested.

We use this agent, as an important auxiliary, to aid in promptly restoring vigor, and it has been very useful.

MODE OF USING THE MACHINE.—We give the patient both poles in his hands first, one in each, and after ten or fifteen minutes take one pole and pass it over the lungs, stomach and bowels, and lastly over the privates, for ten or fifteen minutes or more, once each day. The physician will direct the other remedies to be used. [N. Y. Dissector, vol. 2, p. 208.]

COMA.

When Coma is brought on by physical exhaustion, or great fatigue, or from excessive mental emotions, or prostration from spasms, or protracted and exhausting disease, Magnetic-Electricity furnishes a prompt and ready means of restoration, which no other agent can give, by restoring at once a degree of natural vitality to all the functions of life. [Braith. Ret. No. 18, art. 26.]

MODE OF USING THE MACHINE.—Apply one pole to the nape of the neck, and the other to the chest, heart, stomach, bowels and limbs, under a good degree of power, as will be comfortable. In some instances, it would be better applied through the hands of two persons, in like manner, one holding each a pole, and applying the other hand to the person of the patient.

CRISIS OF FEVERS.—Every physician and nurse knows that all severe fevers have critical days, on some one of which the fever is said to have turned. On these days, the physician watches with great care the crisis, if the patient be very sick, and danger apprehended, that this change will be unfavorable. In violent fevers that set in suddenly, we may look for a sudden subsidence in the febrile action, in which case many patients die of exhaustion on the critical days, or turn of the fever, who would be saved, if they had their vitality and strength supported and supplied by Magnetic-Electricity. We should not omit the use of stimulants and tonics in these cases, but Medical Magnetism will make them much more potent. The same remarks are applicable to those, that were made under *Crisis of Fevers*, to all forms of *exhaustion* from severe or protracted disease of any kind, or from discharges from abscesses, loss of blood, ulcers, or discharges of any kind, cavity of bones, &c.

MODE OF APPLYING THE MACHINE.—Pass a current through the hands of two healthy persons to the patient, generally over the body and limbs, as often and as long as each case may indicate, from fifteen to thirty minutes. [Channing, pp. 137, 138.]

 DYSPEPSIA.

For years past, in the prosecution of our special practice of the treatment of Chronic diseases generally, and Scrofulous

affections in particular, we have frequently met with Dyspepsia as a principal disease, or as a very prominent symptom, and as a consequence, very deficient nutrition. In all cases thus far, the Dyspepsia has readily disappeared under the use of Magnetic-Electricity, used as a principal remedy, or as an auxiliary in the case, and we should expect this result always, where there was no considerable organic derangement of the stomach, or other organs, upon which the Dyspepsia depended, and in that case it would do as much or more than any other remedy to modify the symptoms and improve the condition of the patient. In those cases of Dyspepsia attended with sour stomach, pain in the stomach, spitting up the food, distress in the stomach after eating, with a dull drowsiness, headache and costiveness, we have found prompt relief to follow the use of Magnetic-Electricity, with or without other remedies, as the case required.

MODE OF USING THE MACHINE IN DYSPEPSIA.—Pass a current of good strength right through the stomach, by placing one pole on the spine opposite to the stomach, and the other carried all over the stomach and bowels every day once or twice, or the patient may take one pole in both hands, and the operator passes the other pole over the stomach, chest and bowels, down the spine from twenty to thirty minutes at a time, twice a day if needed. [Channing, pp. 53, 145.]

PAIN IN THE STOMACH AND BOWELS.—In cases of pain in the stomach and bowels from indigestible food, or a morbid irritation and tenderness of the mucous surface of the same; and those pains in the bowels of children that are of frequent occurrence, and distressing to bear, are always readily relieved in a very few minutes by the application of Magnetic-Electricity, applied as directed under the head of Dyspepsia. [Channing, p. 114.]

SPASMODIC DISEASES.

We know of no form of Spasmodic disease, of ordinary and common spasms, that can in any way be so readily controlled as by Magnetic-Electricity. Of course, the physician must have reference to the cause of the spasm, and be governed accordingly in his location of the application and manner of doing it, to insure success, and be governed by general

principles. [Lond. Lan. vol. 6, p. 72 ; Braith. Ret. No. 6, p. 27 ; Channing, p. 135.]

EPILEPSY.

In Epilepsy, depending upon general or local nervous irritation, or mere functional derangement of nerves, or other important organs, we have derived much benefit, and suspended entirely the epileptic paroxysms ; and in some instances palsy, more or less perfect, had existed in the cases which were also cured. Indeed, we have never used it without benefit in any case, and some have been cured by it. We used it as an auxiliary, or we do not think the other means would have cured without it, and this may not have cured, without the other means. *We use the machine generally over the person once a day.* [Channing, pp. 129, 130.]

NERVOUS SYSTEM, NERVOUS DISEASES, SYMPATHETIC NERVE, ANIMAL HEAT, PERIODICITY OF DISEASE, SYNCOPE OR FAINTING, AND WAKEFULNESS.

In all the above forms of disease, the nervous system, either of animal life, (as the sensitive and voluntary functions) or the nervous system of organic or vegetable life, as respiration, circulation, digestion or nutrition, and secretions, or both are largely involved in producing the symptoms and phenomena that characterize both, and whatever it be, or whether both, *the legitimate, natural and principal remedy is MAGNETIC-ELECTRICITY*; and in almost all forms of chronic, scrofulous and nervous diseases, these conditions exist to a greater or less degree in every instance, no matter whether it be derangement of the stomach, kidneys, liver, uterus, or the two nervous systems above mentioned, the one will bring into deranged action the other, and must be corrected by a proper selection of medicine, and Magnetic-Electricity to exalt their action, and oftentimes the latter remedy will be sufficient for all curative purposes. In all derangement of the NERVOUS SYSTEM, producing NERVOUS DISEASES, Magnetic-Electricity is the true source of supplying, in an artificial way, a natural agent that gives health and power, that can in no other way be obtained.

In derangements of the SYMPATHETIC NERVE, we have disturbed digestion, disturbed circulation and respiration, faulty nutrition, irregular uterine action, &c., or some one of them, with, in some instances, a tendency to coldness, either general or of the feet and hands.

ANIMAL HEAT, or the natural temperature of the body is always restored by this agent.

PERIODICITY OF DISEASE, or periodical affections, not connected with natural functions, are generally interrupted by this agent with or without other means.

SYNCOPE, or FAINTING, will always be instantly restored by a current of this agent passed through the system, from the neck to the stomach, or the hands. [See Channing, pp. 16, 41, 59.]

WAKEFULNESS, OR WATCHFULNESS AND WANT OF SLEEP, from nervous excitability, irritability and restlessness, has been always readily overcome by using this agent on the person, through the hands of two healthy persons just before bed time at night. It is to be used by passing the current with the hand of one person on the spine, holding one pole in their other hand, and with one pole in the hand of the other person and their other hand passed over the chest, stomach, bowels and limbs, and may be done with no assistant, by putting both feet in a hot bath, with one pole in the bath, and the other held in both hands of the patient for half an hour.

CASES OF APPARENT DEATH, IN WHICH THERE IS DOUBT IF THE PATIENT BE NOT ALIVE, IN SOME OF WHICH, PERSONS HAVE BEEN KNOWN TO COME TO LIFE IN THE GRAVE.

Under these circumstances, which some have called a trance, some suspended animation, while others have said it was a cataleptic condition, but all agreeing that it is apparent death, and that many have been buried in it, and have been known to be not dead, from the fact that the coffins have been opened, and the persons changed in position, turned over, their clothes torn, and even their own flesh, it is very desirable to know of some means by which such an event never need occur, as it did often at the time of the first appearance of Asiatic Cholera in this country. Magnetic-Electricity, applied as directed under the head of Drowning, Poisoning by Opium, &c., through incisions, would arouse any element or principle of life that

might remain, as certainly and surely as it does in those conditions, and would at once re-kindle the vital spark, but in this case after breathing and circulation was established, it should be used as directed under Coma, and with great gentleness.

RENEWED AGE, OR SUSTAINED YOUTH.

The observations of the author for a period of near nine years of the daily use of Magnetic-Electricity, has resulted in ascertaining many facts, and some curious, unlooked-for results, until they had occurred so many times, and with such uniformity, that he is induced to make the following statement to draw the attention of others to it, for a more extended observation and mature knowledge. In his own person, he has passed a current through himself, to his patients, on an average of from two to five hours every day, for the above mentioned time, and the changes in him, are, that previous to this, for a period of fifteen years, he suffered as much from Dyspepsia as any one we ever knew, that had no organic disease with it of the stomach or bowels, and since which time he has had no Dyspepsia—and would not know he had a stomach, but for a good appetite. His weight has increased from fifty to sixty pounds, with strong health under reasonable use; also, every spring and fall, since he was nine years old, from three to six weeks, he was crippled with chronic rheumatism, which was hereditary in his family, and he can say that he has not felt a rheumatic pain but once in eight years, and that was from extreme exposure, and did not last an hour; and his hair is not as gray now as it was in 1843, and others say he does not look to be as old, and two daguerreotypes of him taken at different periods prove this fact. The same remarks have been verified in all cases as to appetite, and flesh in a degree, of course not so strongly, as perhaps no one ever used it through their person, as much as he has.

We have used it in numerous instances of advanced age, in persons from fifty-five to seventy-five years, with some singular results, one in particular was, that the hair, before very white with age, soon commenced to turn to its youthful color. The change was first observed on the eyebrows by their turning black, from a perfect gray or white; so that in this instance, there was seven gray hairs only left in one eyebrow, and five

in the other, by count, after using the agent daily for five weeks; the whiskers on the cheeks were next observed to be undergoing the same change, and on a close examination of the head, which was much bald, it was discovered that the hair was much changed, and on the bald part where there was a fine crop of short hairs appearing, they were also dark. We have seen the same in several instances. We have also observed some cases where the parties had worn glasses to obviate defective vision from age, in which in a month's time of use of this agent for other difficulties daily, they have been able to lay aside their glasses entirely, and said they saw as well as ever without them, and all their motions and actions gave evidence of renewed powers and vigor. The skin undergoes a change, and from a dry, shriveled, and old appearance, it puts on a soft, elastic, and plump feel and look, and these changes take place in from one to three months of daily use of the agent, without any reference to anything but the diseased condition for which we recommended it. A lady who has used it more or less for eight years for a diseased condition under which she was laboring, does not look as old as she did ten years ago—so all her acquaintances remark, and she has a fine skin, and not a grey hair, and years have numbered quite high with her. These are not single cases by any means, they are numerous, and of common occurrence. We do not mean to say that it will arrest the march of time, or its marks upon the "human form divine," nor offer it as an antidote to age, but we do say, that some seem to have a rejuvenated appearance, and a new lease of life, and others seem to have the ordinary marks of time and age deferred, even at a liberal number of years by count.

We have not said as much on this interesting subject of robbing time of its power to deface us who are youthful, and those who are beautiful, as the facts in our possession would warrant, but we only intended to draw the attention of other observers to the same point, to see if facts sufficient to establish the truth of it, as a general result, could be brought to light. We sincerely hope all our friends will not speak at once, who so much dread and fear the marks of time on their fair forms and faces, as if they do, we might be overcome with the rush for rejuvenation to restore lost or fading beauty, and departing agility.

The above results are perfectly consistent with our theory of the action of the agent upon the animal economy, as we do

and have always contended that it was the principle of vitality or of life, or the result of the action of that principle, whatever it be called, that distinguishes man from inorganic matter, as a living, moving being, subject to his will, acted upon by mind and motive, when, in a state of health, all the forces are in harmony and balanced in their action, and when the system is diseased they are thrown out of balance, and discord prevails the same as in the solar system, as described by the poet :

“Where, the great scales destroyed,
From Nature’s chain, whatever link you strike,
Tenth or ten thousandth breaks the chain alike ;
And if each system in gradation roll,
Alike essential to the amazing whole,
The least confusion but in one, not all
That system only, but the whole must fall ;
Let Earth, unbalanced from her orbit fly,
Planets and sun run lawless through the sky ;
Let ruling angles from their spheres be hurl’d,
Being on being wrecked, and world on world ;
Heaven’s whole foundation to their centre nod,
And Nature trembles to the throne of God.”

The same beauty, harmony and regularity must prevail in the healthy animal economy of the human system, and when the beauty, delicacy and importance of each function, in its proper relation, is understood and appreciated in all their bearings, it will seem marvellous that we preserve our lives and health as well as we do, when there are so many sources and avenues to disturb their balance. And while it is conceded by the wisest and best philosophers, that it is Magnetism that holds the material universe together, and Electricity is the source of all motion in matter, we do boldly assert, that it is a combination of these agents, and a modification of their forces that constitutes life in us, and their due balance of force that constitutes health, which we received when, as we read, God breathed into us the breath of life and we became a living soul. Some call it life, or the principle of life, some vitality, which term we like the best, and shall use it as meaning the same as when we speak of the Magnetic forces of the human system, and we prove the truth of our position by the certainty that we do restore it when enfeebled as in disease, by using Magnetic-Electricity, and we also prove that a certain amount of Magnetic force must be secured by the proper arrangement of the machine, or we do not supply the essential quali-

ties of the agent to make it valuable, as is abundantly proved by the fact that simple Electricity and Galvanism from a battery alone, *will not do it*. It is a matter established with us, beyond all doubt or argument, that all feeble and delicate persons and children will have much better and stronger health by the use of a properly arranged Magneto-Electric machine once a day on their persons, and resist deleterious influences on their health much better than without it. All persons that are liable to perform excessive labor of body or mind, inducing great fatigue, causing great excitement, by means of which the vital forces are greatly and rapidly exhausted, great mental excitements and excesses, loss of sleep, dissipations of all kinds, the bad effects of which will be greatly averted by the use of this agent on such occasions. The approach of the appearance of age or years will be postponed in all. Youthful looks and vigor will be preserved to a later period of life. We cannot better compare the action of this agent upon the human system, than to say it is like the fire to the boiler of the steam engine, and the food is fuel, and after fuel is gone and the fire extinguished, the power ceases to act, or else the engine would keep in motion until the machinery was all worn out; or like the action of Magnetism in the celestial and terrestrial world, if it ceased to act, and to preserve the balance of the universe, all would go into confusion and destruction.

As we shall have occasion to revert to this subject again, under the head of Physical Development and Growth of Children, we shall leave it, with a few suggestions as to the time and manner of using the machine for such purposes as are mentioned under this head, and one more that we will now add, and that is for Baldness, or Falling of the Hair, giving occasion to apprehend baldness. When this condition exists as a strong family characteristic and hereditary, we should expect less than when it was accidental, as from common causes, but in either case, we have no doubt but much would be accomplished to encourage a vigorous and healthy growth of hair; also gray hair is most always owing to an unhealthy state of the skin on the head, and a proper secretion at the root of the hair, in which the coloring matter is not secreted, which in a great many cases would be restored.

MANNER OF USING THE MACHINE under this heading, is altogether general, and is best accomplished by immersing both feet in a warm bath, and putting one pole of the machine into the bath, and holding the other in the hands under a mo-

derate power of the machine from twenty to thirty minutes; and the best time is, at night, just before retiring to bed. If it be not convenient to get a foot bath, one pole can be taken in each hand, and held for a time, and then pass one pole with a wet sponge on it over the chest, stomach, bowels and limbs, with a moderate degree of strength, or you may get another person to pass the current over you through their hand. When it is to be used on the head for gray hairs or baldness, we should recommend covering the head with a large cloth folded several thicknesses, and wet, or a large flat wet sponge, laid on the head, (the hair being first well wet, if there is any,) and let the patient hold one pole in his hand, or set his foot or feet on it, and then with the weakest power of the machine to begin with, and increased as the patient can bear it, set the machine in motion, and continue it from a quarter to half an hour each day or evening.

ASTHMA.

In Asthma, the author has repeatedly availed himself of the benefits of Magnetic-Electricity, with decided and prompt benefit, after other remedies had seemed to do all they could, without cure, or permanent relief. In most cases, and especially such as are from nervous irritation, and called Spasmodic Asthma, it will certainly allay the spasms and relieve the paroxysm, and by continuing its use allay the nervous irritability, and so strengthen the nerves that the paroxysms do not return. We have always used other means in conjunction, and would not say it would cure alone.

Dr. Wilson Philip says of this agent, that, "perhaps, in no disease is this agent (Magnetic-Electricity) of greater value than in cases of Asthma, and I particularly recommend it for this complaint. In nearly every case of Asthma I have had, I have been successful." He says: "A lady from Torquay was brought to me in a carriage, so dreadfully afflicted with the Asthma, that her friends imagined every moment she would be suffocated; indeed, it was enough to make one's heart ache to witness the agonies she was enduring. I placed her under the action of the apparatus (Machine,) administering it so gently that it caused no uneasiness. In ten minutes

her anxious friends, as well as myself, noticed that the breathing was getting easier; in five minutes more, she exclaimed, 'thank God, I am relieved!' She was now breathing quiet, and told me she wished she had tried it years ago, and had not listened to the advice of her attending physician, who was continually ridiculing the agent here used for her relief. In one month she left me, quite free from the complaint. I have heard from her lately, and been informed that she mounts a high hill with the hilarity of a young girl." The ridicule that Dr. Wilson Philip's patient speaks of, is of very common occurrence in this country from a class of medical men, that are so weak and selfish as to imagine that they embody in themselves all that is known, or are too old to learn anything new, and it is, without any doubt, from my own observation, a cause of sending thousands yearly to their grave, or allowing them to pass on to the grave, by either withholding through ignorance, and for the same cause, ridiculing a very valuable agent, and diverting the mind of the friends and patient, from seeking help from sources that can furnish it. [See late London Journal.]

MODE OF DETECTING NEEDLES AND OTHER METALIC SUBSTANCES, THRUST INTO THE FLESH.

It is not unfrequent that needles, and other metallic substances are forcibly thrust into the flesh, out of sight, sometimes their precise and positive location it is impossible to find by feel or touch of the surgeon. In these cases, a very simple and easy mode is suggested of arriving at the point to cut for the object. If it be a needle, or other iron or steel substance, we would take a magnet, (which will always be furnished by the manufacturer of the machine described in this work, through the agent, at two or three dollars expense) and pass one of the poles of the magnet over the place several times, where the needle is supposed to be, and then for convenience in the absence of a delicate compass, take a common fine steel sewing needle, and draw it several times across the pole of the magnet, all the time one way, and it will become strongly magnetized, then remove the magnet away several feet from the needle, and tie a hair or slack twisted

thread about the needle, and suspend it over the place of the suspected needle, and one end will indicate exactly by coming to a state of rest, at the point you are to cut for the needle. [See Smeer's *Electro-Biology*, p. 113 ; *Lond. Jan.* vol. 1, 1851, p. 308 ; *Braith. Ret.* No. 6, p. 155.]

MAGNETO-ELECTRIC AUSCULTATION OR INDICATOR OF LOCATION OF DISEASE IN INTERNAL ORGANS OF THE BODY.

We know it is asserted by many, that the Magnetic current from the machine, will indicate correctly the location of disease in the internal organs, and according to our own observation, there is some reliance to be placed in its effect on or through diseased tissues, to establish that fact, as there is more sensibility in the diseased part to the passage of the current through it, but in our observation it is any tissue that feels it, and no one in particular ; also, if the current (which always goes in straight lines where it can) goes through a bone, it will always be felt more sensibly, than if through fleshy parts, and in our own observation and experience, we think but little of it compared with other means of diagnosis, in locating the disease or telling its character. [See *Channing Medical-Electricity*, p. 46.]

CATARACT.

It has been repeatedly successfully practiced on the continent of Europe, to disperse Cataract in the eye by galvanism ; we have not attempted it, but the testimony is too abundant and respectable for us to doubt its correctness. For such a purpose, and all surgical purposes, a direct current from a machine without shocks, or a current not interrupted, or galvanic battery, is what is wanted only, with suitable needles and conductors, and not a strong or powerful current, as has often been used. The great fault of the English in the use of galvanism, is using too strong a current, which will, in too many cases, do hurt. They do not seem to think, that they are sending a stream of the most intense fire through the part. [See *N. Y. Dissector*, vol. 2, p. 56.]

SPINAL IRRITATION.

Under the above heading, is generally recognized a state of tenderness in a greater or less portion of the Spinal column, ascertained by firm pressure made with the thumb of the examiner, on each side of the joints of the spine, found most frequently in three regions, viz: first, at the base of the brain and upper portion of the back of the neck; second, at the middle of the back opposite to the stomach, and between the lower part of the shoulder blades, and thirdly; at the junction of the spine to the hips, or small of the back, and in these locations it affects, more or less, the functions of the nerves and muscles to which they are distributed in these regions. In bad cases we have seen the whole length of the column excessively tender, and the nerves that go off also tender in their tracks and distribution, so that it would give pain to touch or press the flesh, all over the person.

In all cases, as bad as last described, we find the functions of the mind, lungs, circulation, stomach and bowels, and in females the functions of the uterus much deranged, and when any or all of these functions are much deranged for a considerable time, we find more or less tenderness in the corresponding portions of the spine. We have had a case before us, from Suppressed Menstruation of about ten months standing, in which pressure on the spine would cause pain in the corresponding organs, as the stomach, bowels, or womb, and portions of the flesh were so sore, (and we have seen the whole body much swollen or puffed up,) and the internal organs, sensitive to that degree, that the patient came well nigh fainting twice during the examination, and would have fainted away, if we had not put the Magnetic machine in operation, and restored her immediately. These are cases purely of disease of the two nervous systems of animal and organic life, the first connected with sensation and motion, and the latter with respiration, circulation, digestion and nutrition, and the reproductive functions, and altogether without the aid and assistance of Magnetic-Electricity, we have really a grave and serious disease, and a very troublesome one to cure, as there is so much functional derangement of internal organs, besides the irritation of the nerves.

MODE OF USING THE MAGNETIC MACHINE.—We know of no agent that gives the immediate and prompt relief that is given by Magnetic-Electricity in this complaint. In the case

before us, that was so excessively tender as to cause fainting to the touch, in twenty minutes time the same parts could be handled and felt freely, and without complaint. There is nothing that can be compared to this agent for the prompt relief it brings. We use other means as auxiliaries, and attend to deranged functions, &c.

We give the patient one pole in both hands, and apply the other either directly to the spine, or through our hand, the whole length of the spine, chest, stomach and bowels, and in case like the last mentioned, as in Suppressed Menstruation directed, and for half an hour every day until well.

SWELLED OR ENLARGED TONSILS AND SORE THROAT. (PUBLIC SPEAKERS.)

In a large proportion of decidedly Scrofulous children there is a strong tendency to swelled tonsils on the slightest exposure to damp and cold, which affect the swallowing, breathing and speaking, and are often very distressing in such children when asleep on their back. In those of a more strong and sanguine constitution and temperament, the same causes produce Quinsy, and those that have a tendency to disease of the mucous membranes, have an ulcerated sore throat, or Catarrh in the throat; and clergymen, and other public speakers, are very likely to provoke this disease.

In all its forms, save that of Quinsy, it is a chronic disease, and almost always connected with a scrofulous diathesis or tendency of the patient. We have had great reason to be satisfied with the effect of Magnetic-Electricity, in all the forms above mentioned, and more especially the catarrhal and ulcerated condition of the throat, although we should use it as an auxiliary means, and have realized much benefit from it.

MODE OF APPLICATION.—Pass a current right through the neck and throat in different directions, and sometimes by means of a wet sponge attached to a long conductor, pass one pole into the back part of the mouth, throat, &c., for a moment at a time to stimulate it to a healthy action.

POISONING OR ASPHYXIA FROM CHLOROFORM.

In the condition of loss of sensation and volition from the inhalation of Chloroform, it is now established beyond a ques-

tion, that Magnetic-Electricity, administered in shocks, is a sure and perfect remedy, as yet, in every instance in which it has been tried, and therefore every physician, surgeon, accoucheur and dentist, should always be prepared with an apparatus that can be put instantly in operation before they commence its administration.

MODE OF APPLYING THE MACHINE.—Apply one pole to the nape of the neck or spine, and the other over the the region of the chest, heart and stomach, with a strong power, at first, and after sensation begins to return, it may be diminished. [See Braith. Ret. No. 17, p. 327 ; also a late No. of the London Lancet.

SWELLED BREASTS OF FEMALES AND CANCER.

In many cases of slow and indolent swellings of the female breast where no malignant disease, such as cancer, has been developed, we have always succeeded in dispersing them by the application of Magnetic-Electricity to the part, with such other means as the case indicated.

In Ague of the Breast, if early applied, it will prevent the formation of an abscess in the breast, and if an abscess has begun to form, it will speedily bring it to a state to open, and remove all the hard lumps and cakes remaining in it. If we suspected an incipient cancer forming in the breast, we should certainly try it with hope of success from its well known powers of establishing healthy action in all parts. We have not had an opportunity to try it, but earnestly recommend those who have, to try it faithfully. *Mode of applying the Machine*, is to the part. In some forms of the malignant enlargement of the breast we might, and should use Magnetism, as in Cancerous affections and Fungous Hæmatodes. In the fatty enlargements, we would use the direct and uninterrupted current, and the positive pole to the part.

TESTICLE.

In all the forms of diseased and enlarged testicles, that were not malignant in character, we would apply the same

remarks that were made under the head of Swelled Breasts, as equally applicable. We would also include the proposition to use it (Magnetic-Electricity) if the disease were suspected to be cancerous, Fungous Hematodes, or any malignant disease.

METALLIC OR GALVANIC BRACELETS, RINGS, &c., PLASTERS.

We see very often the above articles advertised for sale by speculating empyrics, accompanied by a host of cures, letters and forged certificates, some of which we have taken the trouble to prove so, and we should not think it worth our time to mention them at all, except to point out the fact and the reason, why they must be powerless for any medical purpose. All that we have ever seen, were either rings or belts, and may have two metals in their construction of known galvanic power, but their arrangement has been such, that their ends terminated with one another, and if they generated ever so much power, (while they do not generate any, for the simple reason, that their arrangement and mode of application absolutely prevents them from it,) it would be in a circle around the part of the body or limb to which it was applied, and would not touch it, nor would the current pass through any part of the person; hence it could not affect anything. We have made a galvanic chain which was very efficient in conveying a current of galvanism through parts of the person, and on one occasion, where it was applied for toothache, it blistered the skin in fifteen minutes, but cured the toothache and the ague in the face at the same time, but in all these arrangements, to be good for anything, there must be metallic connection between the ends of the ring or belt applied to different parts of the person, so that the current must pass through the person and diseased part, to be of any use or value; and any that are not thus arranged and applied, are not of the slightest consequence.

GALVANIC PLASTERS are also much applauded by the same class of people who choose to speculate on the credulous, and extract money from them, without rendering an equivalent, under the scent of a name, and are entitled to no more, if as much confidence, as any of the common plasters which

apothecaries always keep and physicians prescribe; and one reason why they cannot be of any more service is, because, if they were ever so highly charged with Magnetism or Galvanism, they possess only one element, and are applied to but one spot, and, of course, could not furnish a current, while if we take a bit of sheet copper and zinc, and apply them to different parts of the person, and connect them by a wire, we have a current passing through the part, and, of course, an influence given off. [See Lond. Lan. vol. 11, p. 592.]

ELECTRO-PUNCTURE.

This is another mode of using Electricity, becoming very popular among surgeons and physicians in various diseases, with approved success, and consists in passing an uninterrupted current through, or to the part, from one pole of the Magnetic machine or Galvanic battery to another, for a great variety of objects in different diseases.

Mode of operating is fully described in the journals, and as each surgeon may have some plan peculiar to himself, we refer the reader to those journals for a description of various modes of operating. [Lond. Lan. vol. 2, 1844, p. 469; vol. 8, p. 128; vol. 10, p. 326; Braith. Ret. No. 3, p. 65; No. 4, p. 116; No. 5, p. 63; No. 8, p. 155; No. 10, art. 110.]

DISEASES OF THE SKIN IN GENERAL.

The author would refer all persons that wish to know the value of this remedy (Magnetic-Electricity) in skin diseases, to the article under the head of Salt Rheum, and we simply remark here that there are none of the forms of skin disease, in which we should not regard it as highly valuable. Ring-worm always gets well under its use. We have not used it in itch, as our patient's have not had it, and as it is an infectious disease, we should not expect much from it.

AFTER PAINS—FALSE CONCEPTION.

All accoucheurs and midwives, are aware that many females suffer much from pains after birth, like those during

birth, which, in some instances, became very distressing to the patient, tedious to bear, and often keep the patient down and weak. After a few of these pains have been suffered, it is always better to give the patient relief and rest, for which purpose, instead of giving opium as is usual, the physician may use Magnetic-Electricity, and it will stop them. It should be used as directed under the heads of Labor and Flowing.

FALSE CONCEPTIONS.—This is another condition in which we may find this agent of considerable value, by introducing the conductor into the womb, to produce expulsion of its contents, and to arrest a dangerous flooding, which is often likely to occur. [See references under Labor, and, N. Y. Dissector, vol. 4, p. 182.]

ANURISM.

This is another formidable surgical disease, in which the English and continental surgeons of Europe, have given us repeated examples of their success with the Galvanic agent. It can also be as well done by a direct current of the Magneto-Electric machine. When these are used for such a purpose, they should be so constructed as to give a direct current and without shocks or interruptions, as an interrupted current would be too painful to bear, and of no advantage in this case. Such machines can always be had when desired, from the agent of the machines herein described, and will be always furnished to order, and whenever used, or selected by the surgeon for use, a very strong one should not be chosen. Needles and all the appliances for use, will be furnished when ordered. [See Braith. Ret. No. 14, art. 102, art. 101 ; No. 15, art. 130 ; No. 21, art. 85.]

NÆVI MATERNI, MARKS, MOTHER MARKS ON CHILDREN WHEN BORN.

The marks here alluded to, are such as are frequently seen on children and grown persons, and are such as they are born with, and are called Mother Marks, and when they are not on

the face or hands, are of no consequence whatever as a general thing : but when they appear on the face and hands, often form a source of great embarrassment to the subject of them. These marks are now the subjects of successful removal by Electricity or Galvanism, by passing a direct uninterrupted current through them, and causing adhesive inflammation to take place in the small vessels of the surface that carry the coloring of the blood. A fine platina wire with a steel point is passed through the mark or spot, and a current of Electricity sent through it which heats the wire nearly to a red heat. [See Lond. Lan. vol. 2, 1852, p. 305.]

CANCEROUS OREM.

In that condition of the gums and mucus surface of the mouth of children, and sometimes of adults, in which the gums are swelled, dark colored and spongy, with blood oozing from them, so disorganized that it will not coagulate, we know of nothing that will so much aid the efficiency of other means as Magnetic-Electricity, applied directly to the part affected, and to the whole system as in Scurvy and Purpura. It is a disease accompanying always an excessive low state of vitality, and nothing can be more appropriate to impart vitality in connection with tonics, stimulants and astringents. It may be used two or three times a day for half an hour, and would be better through the hand of a healthy person.

HORSES OVER FED, OR AT AN IMPROPER TIME, OR FROM OVER DRINKING OF WATER.

In all cases where the cause or condition is the same in animals that it is in the human species, this agent, (Magnetic-Electricity,) is equally useful as a curative means. In one instance our own horse, that had been improperly fed with ears of corn, when it was in the habit of eating oats only, and driven it twenty-five miles the same afternoon. It was taken so sick with what farmers call the belly-ache, or colic, that it would lay down in the harness the moment it stopped, and before twelve o'clock at night we had exhausted all our

medical resources and were so sure the horse would die that we made a bargain with a man to take it away in the morning and bury it. As we were waiting with the animal to make it as comfortable as possible, although it was so near dead that by striking it with the lash of a whip to see if it could stir, it only moved its ear, we happened to think how we had succeeded in treating colic in the human subject, and immediately set an apparatus to work, applied the current directly through the stomach and bowels for an hour or more, at intervals. When we began, the animal was so much bloated with wind and gas in the bowels, that the sides were raised higher than the back, but it took the bloat all out in two hours, and in two hour's more, the animal stood on its feet, and at four o'clock in the morning it took hay to eat, and in three days time it was led home, twenty-five miles, and the same horse is still alive and well, though this sickness occurred in March, 1845.

This agent would be equally applicable in all the Strains, Sprains, and Diseases of horses, that are similar to those in man, and should be applied in the same way. We should use it for Botts in horses.

HOVEN, OR BLOWN CATTLE, FROM EATING TOO MUCH FRESH CLOVER, OR GETTING CHOAKED WITH IMPROPER FOOD.

This agent would be equally as sure a remedy in the above diseases of cattle, as in horses, and the application of it would be the same. Cattle are often destroyed by being turned from short, into fresh, high or flush clover feed, and in this case, the farmer has an undoubted remedy by giving the animal half a pint of soft soap to a pint of milk, and then using this machine.

WEAK BACKS, STITCH IN THE BACK, CRICK IN THE BACK OR SIDE.

Many persons of both sexes, but more particularly females, suffer much from what they call weak backs. As a general thing they are connected with some other disease, but not always so, and whether they are or not, we have always been

able to cure them readily, with nothing but Magnetic-Electricity. Of course the practitioner should be satisfied of the cause, as it would vary his directions much in the use of means, as the application would be quite different if it was from a Strain, or Over Lifting, or from Falling of the Womb, in the female, or over excited genital organs in the male. In either case it is a remedy, but in Falling of the Womb it should be applied as directed under that head, and if from over excited genitals in the male, it should be applied as directed under Masturbation, and if from a strain, it should be applied by having the patient hold one pole in his hands, and have the other applied directly to the weak part.

In Stitch, or Crick in the back or side, it will always cure with two or three applications, and should be applied directly to the part. Let the patient hold one pole in both hands, and apply the other directly to the lame part, either by putting the pole to it, or through the hand of the operator.

CHRONIC BRONCHITIS, AND CATARRH OF THE LUNGS.

Although the author does not regard the two conditions mentioned in this heading as precisely the same, yet the actual state of things so nearly alike, that the Magnetic treatment would be the same, in the absence of any inflammatory symptoms, that we have thought proper to place them together, and we have always succeeded in curing them in the absence of any considerable organic lesion. In Catarrh of the mucus membrane of the Lungs, or any other Mucus surface, we hardly recognize any other sure cure, though we always administer some of the gum resins, as tincture gnaiaec or some balsam, and perhaps some form of anodyne in conjunction, with a view of hastening the cure. We apply the machine, the patient holding one pole, and put the other directly over the chest, or through the hand to the chest every day. [See Channing.]

CALLOUSES.

From whatever causes Callouses may occur, we have always succeeded in removing them, by applying the current directly to them, through both poles in all directions, once every day from fifteen to thirty minutes, until removed.

RHEUMATIC SWELLED JOINTS.

We often see severe consequences following Rheumatic and Bilious fevers to the joints and limbs of patients, (and in our observation badly treated cases, or it would not follow in any of them) causing severe swellings, with and without abscesses; and in rheumatic patients, it attacks the joints, all of which are completely under the control of Magnetic-Electricity, promptly applied. When the pain and soreness are very severe, we apply it to the limb or joint through our hand, the patient holding one pole and we the other. In this case, and all rheumatic diseases, we never withhold the agent because there is fever or inflammation present, and we always obtain immediate relief for the patient. Use it once or twice a day from fifteen to thirty minutes at a time.

PLEURISY, DISEASE OF THE BLOOD, IMPERFECT DISTRIBUTION OF THE BLOOD.

There can be no doubt from what we know of Magnetic-Electricity, that its action in the earliest stage of Pleurisy would be decidedly favorable, and arrest it at once; but in our opinion, after inflammation had fully set in, and reaction fully established, we should not use it until after bleeding had been practiced and perhaps a full dose of opium given, and then we should expect to put an immediate end to it. Dr. Channing speaks favorably of its use in this disease. In what is called Disease of the Blood, he also recommends its use. We can readily understand why it should be valuable in that condition. As this agent promotes the digestion and secretions, and vitalizes the whole system, it is easy to see that when digestion, secretion and circulation are well performed, as it is through these sources the blood becomes impure, that the blood should be made more healthful, as the source of it is more pure.

In unequal distribution and circulation of the blood, from the absence of an equalized nervous power, there is, perhaps, no agent that will more certainly equalize it, and at the same time equalize the circulation of the blood.

THE MACHINE FOR PLEURISY should be used, by sending a current of as much power as can well be borne from the

spine directly to and over the the diseased and painful side, and continued until the pain ceases and the patient perspires freely. For diseased and imperfectly distributed blood, it should be used generally over the whole body, as in Scurvy and other general diseases. [See Channing on Med. Electricity.]

DYSPNŒA OR DIFFICULT BREATHING.

In all cases of this complaint unaccompanied by any organic disease, we have relieved them at once. Dr. Channing says: "Difficult Respiration, from every source, excepting organic lesion, may be treated by this agent with prospect of success." The same rules of application would be observed as in Asthma. [See Channing, p. 123.]

OPACITY OF THE CORNEA AND ALBUGO.

Dr. C. U. Siglio, of Corfu, [See *Revue. Med.* March, 1844,] reports cases of this kind treated successfully with this agent. The cases are detailed in the journal referred to, and a larger statement of the cases can be found in Dr. Channing's work on this subject, and it is said to have dispersed the opacity of the eye altogether. For this purpose, machines giving a direct uninterrupted current, or a galvanic battery should be used. Place the negative pole in the mouth, and the positive on the eyelid, the current should not be very strong, and may be continued from ten minutes to half an hour, repeated every day.

GENERAL DEBILITY, OR ATONIC CONDITIONS.

There is no condition of General Debility, whether of the whole system, or any particular part, function, or organ, in which Magnetic-Electricity is not decidedly indicated, to co-operate with or supply vitality. Its operation is always in the direction of health, in the most opposite affections. This is explained by the fact that its operation is to quicken the vital powers and natural functions of the part to which it is applied.

ATROPHY, OR WASTING OF A PART OR LIMB, PERISHING.

In the wasting of an organ by deficient nutrition, either from want of nervous supply, or of vitality in the tissue, the daily use of this agent is indicated, and we have always found the result favorable; and, in one instance of a paralyzed limb it increased two and a half inches in circumference by measure, and its powers were correspondingly increased. We have in another place spoken of its use in Hypertrophia or enlarged part, the philosophy of this apparent diversity of its action and utility, for which we would particularly recommend it, in enlarged liver and other internal visera, is to be explained on the principle, that it regulates as well as supplies vitality when deficient, and restores balance between sets of organs, or the functions between different sets of organs, as Secretion and Absorption, and hence produce a healthy balance of action, and when Secretion or Nutrition is too rapid for the action of the absorbents, the enlargement is removed, and in an opposite way in an opposite state, and all in accordance with its laws of action. The application of the machine is general, as in Scurvy and Purpura in the debility of the system, and to the part where located, and Magnetic-Electricity is always best. [See Channing, pp. 150, 47, 48, 49, 50.]

ALTERATIVE ACTION, PROMOTE SECRETIONS, SEDATIVE ACTION, PROMOTION OF NUTRITION, PROMOTION OF ABSORPTION, CAPILLARY CIRCULATION, PERSPIRATION PROMOTED.

Whenever there was evident torpor of any of the functions of organs we have found the use of Magnetic-Electricity to stimulate them promptly to action, and hence it is evidently a promoter of secretion when deficient in any organ. If the torpor be general in all the secreting organs of the system, it will stimulate them, and hence is an alterative agent. If any of the nerves be morbidly sensitive and painful, it allays the irritability and pain in all cases where we have used it, if the Magnetic powers are properly developed in the machine, and if they are not, it is proof positive that, that particular machine is either not fit for use, or is improperly used.

It is an invariable promoter of digestion, and assists all the functions of nutrition. When the absorbent vessels have lost their energy of action, it supplies the necessary activity and promotes absorption. In almost all cases where perspiration is absent, it has produced it, and we have regarded the appearance of it, as an evidence that the machine had been used enough for that one time. In all the above cases and conditions, the physician is, and ought to be the proper judge as to the use of the machine, whether general or local, according as the disease itself is general or local. The verification of all the above statements will be found whenever tested, and the detail of application should be left to the judgment of the physician, and if he has not common sense and judgment enough to direct him in it, he had much better change his business, as both he and his employers may be assured, that he is not fit to have the charge of their health. [See Channing, on the application of Medical-Electricity, pp. 48, 49, 50, 51.]

SCROFULA IN GENERAL.

Under this head, according to our views, there is a long list of diseases known to the profession, by other and various names, which are as purely scrofulous as those described by authors, and to save a confusion of ideas we shall adopt the usual names by which they are described in books, by authors on medicine, and as it would require a large volume to give and illustrate our views on this subject, and make them as clear to others as to ourself, we must reserve them for another time and place, and we believe, when they and the practical deductions that follow are fully understood, as a matter of course, it will be found that Scrofula, under any and all forms in which we find it, both simple and combined with other disease, will be as certainly and easily under the control of appropriate means, as the most simple disease we have to contend with. One of the greatest errors of the day, in the profession, we conceive, (in the majority of those who practice and teach the healing art,) is, in their retaining nearly the same, only modified, practice in Chronic and Scrofulous disease that they do in Acute, under the various names they are pleased to give them, and we shall retain them to save con-

fusion, though we would not, by any means, be understood to retain the practice in detail, in either Scrofulous or Chronic diseases generally, nor will it be possible for us, in any degree, to shadow forth our detail of treatment here, further than the use and application of Magnetic-Electricity in all forms of disease partaking of a Scrofulous character in any degree. We assume that there is no remedy that will do as much for any Scrofulous condition as this alone, (not that it is a specific for it, or for any disease,) nor that it will remove a Scrofulous tendency, condition or diathesis as certain as this agent; nor can or will this agent do as much alone, as when combined with other suitable and appropriate medication, applied according to the condition of each case presented. Therefore we combine both, when needed, and although we never had any reason to complain of our success in this class of disease before we used this remedy, as compared with others, nor did our employers complain of it, as is evidenced by the fact, that for years before we used this agent, we were much employed in the treatment of Chronic and Scrofulous affections to a greater degree than any one we knew among our cotemporaries and co-laborers for fifty miles around us, which was achieved alone by our success in that department, nor do we consider it a violation of modesty to say what we know, and have sufficient means to prove its truth, and will be always happy to show to the profession the results of the practice, as well as detail, and in being the agent of bringing relief and cure to such as are afflicted with either Chronic or Scrofulous disease, that is susceptible of cure; but we do earnestly contend that they are all susceptible of cure in their early stages, if properly treated. We ought, probably, to state here, that all Scrofulous disease is chronic or slow in character, but not all chronic disease is scrofulous at first, though there is no doubt that protracted chronic disease will cause, after a time, many of the conditions that exist in scrofula, and therefore require a similar principle in treatment.

The foregoing remarks apply to all forms of disease of a Scrofulous character, and we say that there is no form of Scrofulous disease that will not be benefitted by Magnetic-Electricity alone, and to a much greater degree when combined with other suitable remedies, than with the other medical remedies without medical Magnetism, and we do most positively assert, that many cases of Scrofulous disease may be cured by combining both, by physicians that well un-

derstand both of them in their proper application, which otherwise must necessarily be lost, if both are not understood and intelligently applied in each case as they occur.

We have dwelt thus at length upon this point of Medical Electricity in Scrofula, because there is not a more important class of disease than this, nor one that destroys more human life and happiness, and among the victims to which, so much of intellect and virtue is lost to society and the world, nor a class of disease about which so little is well understood, to lead to a successful practice by those who justly profess and practice the healing art.

PHTHISIS PULMONALIS, OR CONSUMPTION.

This is a grave form of Scrofulous affection of the lungs which, perhaps, numbers more victims than any other form of Scrofula, in the North American portion of the continent, than in any other civilized portion of the globe of the same extent, and when early recognized, as it always may be by intelligent observers, if the patients be so circumstanced in life, pecuniarily, as to enable them to command their time, and dispose of themselves, as the circumstances of their particular case may require, it may always be arrested in its progress, and the patients cured by a course of treatment changing the whole tendencies of the constitution.

This can be much more certainly done in young persons and those under middle age; and in children it can always be averted, and good constitutions given in their place with a proper course of management. We are stating no more than we know on this point, from experience in hundreds of cases, nor any more than may be always done, with proper and correct management, before the vital and rallying forces of the physical system are too much exhausted, or the vital organs too much destroyed to be capable of being healed; and we can find hundreds of persons that would state most positively that we had cured cases that were called Consumption in themselves or friends, while the facts are that we simply put their vital and physical forces in a way to act, with such a degree of energy, that their systems were able to resist its further encroachment, and they got well themselves, a point easy to achieve in the early stage of disease, when circumstances

favor if we only know how to help the patient, and not to hinder them in the efforts of nature in a restorative process.

We believe that no well informed physician will dispute but that debility is one main feature in consumption, and among the first observed, irregular circulation of blood, and undue quantities in particular localities, imperfect nutrition of the body, and irregular heat of the person; each of the previous conditions frequently exist, in a measure, in some instances, before the patients call themselves sick, and, as a consequence, much irritability and irregular nervous action exists, varied by the habit and tendencies of the individual and temperament.

We are aware that, in most instances of afore-mentioned disease, (Consumption,) there is cough present, which is distressing to the patient and alarming to the friends, and they call on the doctor for a cough medicine, and they do just as we used to do until we learned better, rack our brains for a cough medicine to cure the cough, and almost certainly, if the patient be irritable and nervous, with a little reaction of a febrile character, our cough agents will be selected from a class of remedies that will debilitate the patient more, and derange the function of nutrition, and a set of counter irritants such as blisters and searons that will make them more irritable, and the patient is hurried along on the downward road, and if they be very Scrofulous in their tendencies and nervous in their temperament, such is surely to be the result from such practice. In our judgment, the common-sense course would be, to pay but little attention to the cough, as it is a mere irritation with some congestion in many cases, and if we first equalize the circulation, irritation will be less and respiration more free; the cough will leave, digestion and nutrition be better performed, and the patient with a little help from Magnetic-Electricity and tonics daily applied, such as are alterative tonics, get well, and if followed up by proper physical training to develop the chest and muscles of the whole system and expand the lungs to enable them to circulate much blood well oxidized, the patient is cured so that he will remain cured. In a great proportion of young persons the tendency to consumption and Scrofula may be entirely destroyed and exchanged for vigorous health. We cannot here enter into any detail of means further than to describe the manner of use of Magnetic-Electricity, which is among the most impor-

tant of any, and in many instances, all else will avail nothing without it. The above remarks are applicable to all forms of Scrofulous disease and tendencies, whatever may be the name it is known or described by, and the general principle of treatment and management will hold equally good, though the detail of treatment may be varied, and in mentioning other names and forms of disease, that come under this general head of Scrofula, we shall do little more than to mention them with the mode of using Magnetic-Electricity, as a principal means in aid of the cure.

THE MODE OF USING THE MACHINE, adopted in cases of this kind, has been to give the patient one pole in both his hands, we take the other covered with a wet sponge, and pass it from the nape of the neck down the whole length of the spine, under as much power of the machine as can be well borne for five or ten minutes, then over the chest, stomach and bowels for about the same time, then take the same pole in our hand and pass our other hand over the same regions with pretty good friction until the surface be warm and dry, and then, for a few minutes, either set the feet in a warm bath with one pole in it, or take the feet in our hand and pass the current the whole length of the body in that way. This operation should be performed every day, and there may be cases that would require it twice a day.

GENERAL REMARKS.

We have used this agent, in some instances, in the last stages of Consumption, at a period when the patient was nearly gone, tubercles extensively ulcerated and being discharged, and when we had told the patient there was no hope of recovery, for the purpose of soothing and supporting the nervous energies, quieting the nervous restlessness and exhaustion which always prevails more or less, with great comfort to the patient, procuring good rest and sleep, and giving better tone to the stomach and better relish to food under a formerly capricious appetite, always telling the patient, that it could only add to his comfort while remaining, but they would insist on keeping it up, and as they expressed themselves it made them feel so quiet, rested and supported.

Under the above condition we have used it at evening

before the usual period to sleep, so as to leave them to go to sleep for the night, and have used it also in the morning or fore-part of the day. In this case we use it through the hand applied to the person of the patient, and over the same regions of the body described under the head of Consumption. If the patient be a female we get a female assistant, and while one person with a pole in one hand, takes in their other hand both the patient's hands, the other person with a pole in one hand passes their other hand moistened over the spine the whole length, over the chest, stomach, bowels and limbs, from fifteen to thirty minutes.

The above remarks and mode of application are equally applicable to a state of extreme exhaustion from any other kind of disease to procure support and ease, and consequently comfort to the patient.

SCROFULOUS DISEASES OF THE KNEE JOINT, HIP JOINT, WHITE SWELLINGS OF THE JOINTS AND LIMBS, ABSCESSSES, MORBUS COXARIUS, &c., &c.

All of the above named diseased conditions are entirely, or almost purely Scrofulous in character, and, perhaps, we might say always, excepting those that follow after some injury or violence done to the part in persons of Scrofulous tendencies, yet not so strongly as that, but for the injury received, they would not have been thus affected.

The more purely Scrofulous the patient, the more slow and insidious will be the approach and attack of the complaint, and less likely to attract the attention of the physician, or patient, until it has advanced to a stage and degree of grave importance.

The less Scrofulous tendency about the patient, and more nervous irritability, the more acute and rapid will be its onset and advance, and the treatment necessarily needs modifying accordingly.

It is entirely impossible, consistent with the limits assigned to this publication, to enter into any detail of theory, or the medical treatment of the above diseases, beyond what we have said under the general head of Scrofula, and the same principles hold good in these cases, of medicine and management,

save what modifications result from tissues involved in disease, which all intelligent practitioners of medicine will readily recognize. It may be well to remark that those persons who are most easily affected by Magnetic influences, will be much more readily under the influence and control of Magnetic-Electricity in their diseased conditions.

IN SCROFULOUS DISEASE of the knee joint we can distinguish no difference in the principle of disease or the treatment of Scrofula, whether it be in one joint or another, as the knee, ankle or hip ; and since we have used Magnetic-Electricity, (about nine years) we have always succeeded in curing every case, that was not otherwise complicated with other disease putting the matter of restoration out of the question, with less time and trouble, and more certainty of success in extreme and doubtful cases, than with any other mode or practice.

We can only enumerate some of the medical agents used in conjunction with Magnetism, under all forms of Scrofula, viz : Iodide of Manganese, Iodide of Iron and Ioduretted Chloride of Gold, Carbonate of Manganese, Phosphate of Manganese, Sulphate of Manganese and Arsenic, with some vegetable and alterative tonics, stimulating alterative ointments, and if there be much irritability, we use Anodynes, and the success attending these means have often astonished us, as to the time required to cure, and the certainty of it, in extreme and, under other treatment, hopeless cases.

We have often witnessed the treatment of these cases in the various hospitals and public places of charity in this city, and seen limb after limb cut off and cast away, as being the last resort of the healing art, until the observation became so painful and disgusting to our senses, that we abandoned visiting them ; and these amputations were performed too, on cases that our knowledge and experience told us, we had cured many that were more hopeless. We know we have repeatedly done it. We would not be understood to underrate, or lack a proper appreciation of surgical skill, but we shall ever contend that the true surgeon, whose skill and advice is valuable, will ever be much more proud of the cures he has effected without cutting off diseased limbs and parts, and leaving his patient mutilated, crippled and deformed for life ; and he will never speak of operations in surgery with anything but a feeling of humility and regret, that his science in healing could not prevent so painful a necessity. The public have good cause to be

afraid and jealous of the man who boasts of, and is ambitious of his operations in surgery, for such men always leave their mark behind them, in people mutilated and deprived of their limbs. An operation is by no means to be proud of, because it is a mere mechanical affair, and any smart man can be taken from a multitude of mechanics, and if he has the will and fixed purpose to do it, can learn in a day's time to operate as successfully in amputating, as the most boastful surgeon of the country, though not quite as dexterously, nor in as short a time, as it is, in fact, a mere mechanical art; while to cure without cutting, is the perfection of the science.

MODE OF USING THE MACHINE *in the above cases*.—We have used it both local and general: general, by putting one pole in the patient's hand and carrying the other over the spine, chest, stomach and abdomen, and to the affected part, sometimes putting both poles to and about the affected part, and always closing the operation by passing the current through our hand. We continue the operation from twenty-five to thirty minutes and repeat it each day, or oftener if the case require it.

SCROFULOUS ULCERATION IN THE LYMPHATIC GLANDS ABOUT THE NECK, CALLED BY SOME KING'S EVIL.

The above named disease is nothing but one of the forms of pure Scrofula, seated in the Lymphatic Glands about the neck and throat, and may affect the Lymphatic vessels and ganglia of any other part, and frequently does, forming Abscesses, cold or indolent Swellings, White Swellings, as they are frequently termed, in any part of the body.

The principle of treatment in these cases is the same as any form of Scrofula, and the remedies the same in principle. Magnetic-Electricity will be found a most efficient aid, conjoined with other means.

MODE OF USING THE MACHINE should be general and local. The current should be passed through the whole system to give energy and tone, and to the part to give healthy and vigorous action. In persons affected in this way, an advantage is obtained by passing the current through two healthy persons.

SCROFULOUS OPHTHALMIA, OR SCROFULOUS SORE EYES.

The worst cases of this form of sore eyes as readily yield to this mode of treatment, as any form of Scrofulous disease. We have never had a case, alone or combined with other affections, but that were readily removed, and disappeared entirely as the patient's general health was restored.

MODE OF APPLYING THE MACHINE is, in this case, general and local, as above stated, and in all forms of Scrofula; finishing the operation by its local application to the part mainly affected, and through the hand to the eye.

SCROFULOUS AFFECTIONS OF THE MUSCLES.

In all cases where the muscles are feebly developed, soft and flabby, it is owing to Scrofula in the system, and as it is never noticed by the family or physician, until it shows itself in the form of spinal curvature or distortion, we shall say no more of it here, than to remark that it can be entirely remedied, and the patient given a good vigorous muscle by proper management and treatment of medicine, exercise, and Magnetic-Electricity. The application of the latter would be general, and we shall conclude what else need be said when speaking of curvature.

SCROFULA AFFECTING THE BONES, OR CARIES OF THE BONES.

This is a disease that may affect any bone in the body, but most commonly the long bones of the limbs and short bones of the spine, is connected with White Swellings, and is alluded to under former heads spoken of, and will be more remarked of under Curvature of the Spine. The principal of treatment is the same, so far as Magnetic-Electricity is applied, as in other cases last mentioned.

GROWTH AND PHYSICAL DEVELOPMENT OF CHILDREN.

This subject should occupy the attention of the wisest heads as none has been so seriously neglected, or so little under-

stood ; and when we consider that the greatest by far of the sum of human happiness depends upon our physical perfection, the magnitude of its importance forcibly appears. We claim that it is a subject that should be properly understood by the people at large, who are so vitally interested in its truths.

It may be presumption in us, (when from the necessary limits of this work, we can only glance at it) to touch on so momentous a subject ; yet, as there are some things coming before the physician daily, in which (if he properly understands the subject) a few words of advice may produce much happiness and prevent inevitable misery, therefore we mention a few of them.

Far too few of us, that are called physicians, make it a point to study attentively and practically the laws of nature to which we must all bow in submission, as we can neither repeal them, nor avert the consequences of their infringement ; therefore we should study to harmonize our conditions with those laws, given in infinite wisdom for our happiness.

To illustrate this, it is apparent to the most ordinary mind, that a watch cannot give correct time, unless each part is perfect in itself, as the loss of a single cog from one of the wheels will destroy the action of all the rest, however perfect they may be ; and the parts may be all perfect, as single parts by themselves, yet if they do not harmonize in size, if any one part is not in exact proportion with the dimensions of all the other parts, it will cause discord and throw the whole machine into confusion.

Hence it is with man in his organic, mechanical and animal arrangement, equally essential that all parts are in due proportion to all other parts, as well as perfect in themselves, or we cannot have health, strength and harmony in their action, for we have in man (an animal machine) important organs, and sets of organs or instruments, that belong to the human machine, and are essential to its existence.

Among these organs may be mentioned, first, the lungs ; second, the heart ; third, the stomach and digestive apparatus ; fourth, the brain and nervous system of animal life, and the nervous system of organic or vegetable life, by means of which, circulation of the blood, digestion of the food, respiration, absorption and nutrition, are all carried on in our sleep, as well as when awake, and independent of our will or choice, and the perfection and strength, or energy of these functions

harmoniously performed in due balance of power, constitutes the perfection of health of body and mind, and without such balance, harmony of action and strength of proportion, nothing can be done perfectly.

The object of this article is to point out some of these physical defects, their causes and origin, but mainly to hint at a remedy for them, and make the practical remarks in the shortest possibly space.

The two main sources of physical defects are hereditary taints, and the subsequent management, or the want of proper care of children, up to the age of from twenty to thirty years, depending entirely upon circumstances connected with each individual person, and their habits of life.

Those causes that are hereditary, are such as are transmissible from parent to offspring, and those that will engage our particular attention, is the Scrofulous taint, or Diathesis, which must inevitably entail misery, wretchedness, and uncertainty of life upon the child of Scrofulous parents, whether it exist in father or mother. Opinion is divided on the point of whether father or mother is the more certain to transmit it; both do transmit it, and the only certain remedy against the transmission of hereditary Scrofula is, for such persons as have it marked strongly on them, never to marry; the second best mode is, for any Scrofulous person never to marry another, that is in any degree like themselves, in Diathesis, color of skin or hair, or physical formation. Syphilitic taints always give origin to tainted constitutions in children, which are both Scrofulous and Syphilitic, and are much worse than Scrofula alone.

A Rheumatic Diathesis or tendency is also transmissible, but it is of much less serious consequence. Gout is also transferable to offspring.

A tendency to Insanity in families, where it has often occurred, is a constitutional taint of brain coformation, and should be avoided. As it is not our purpose to say more upon this subject, than to drop some curative, prophylactic and remedial remarks, we shall proceed to offer some means of cure and prevention, and leave the subject for another volume, where it will be treated more fully.

Of the kinds of physical defects in our formations, we will remark, first, that too large a brain may be given us, and we have precocity of intellect, and if accompanied by active temperament, as it is almost always, we see a child manifesting a

mind beyond its years, and a muscular system small and attenuated, soft and flacid to the feel, muscles neither plump or firm, flesh soft, and lacking that rudy flesh color which is obvious in children, well formed. Most of these cases have blue or grey eyes, fine flaxen hair, pale and thin face; yet some strongly marked cases of this kind have a hazle or nearly black eye, auburn, dark brown, and nearly black hair, always fine and silk like, with sometimes quite a fair skin, but may be brunette, great activity of motion, small bones, small muscles, small chest and precarious appetites, small neck generally rather long, and the base and back part of the brain over the back of the neck small and narrow; with this latter state is always found a small flat chest, and narrow drooping shoulders, flat stomach, all the outlines of the person angular and sharp, sore throats and swelled or enlarged tonsils, and the whole frame exhibiting more of its bony arrangement, than is consistent with well balanced physical forces. Children are generally born with these defects, and we mention them with a view, first, of preventing them; secondly, when they do exist, of pointing out the means of remedying them. All children that are Rickety, are strongly marked cases of Scrofula. All that have enlarged bowels and very large appetites, accompanied with paleness of the countenance, and are thin in flesh, are also laboring under Scrofula. We have seen them frequently in the public charities, where many of this class are collected together, kept constantly on the stool with a large piece of brown bread in their hand from morning until night, with Diarrhœa and Piles, a practice when allowed to exist in any place except where the most benighted ignorance reigns, most barbarous indeed, and inhuman toward the child, the very means of perpetuating its miserable condition. All children that have bowed or bent limbs, and enlarged wrists and ankle joints are Scrofulous. Almost all cases where there are sores and eruptions of long standing, are children of a Scrofulous Diathesis. All children that have pale and puffy, or apparently bloated or swelled lips and eyelids, those that have a tolerably full face, a thin or emaciated body or person, are of the same class; those that are born apparently well, and yet do not thrive and grow well, are of the same class; all of these conditions are more or less Scrofulous, either from hereditary taint, or from improper management after birth.

In all perfect, well born children, they are born with a well

proportioned brain, with an equally good proportion of it in the base of the brain and back of the head, good broad deep chest, the whole person plump, and flesh and muscles firm and good, and not a fastidious appetite, and in these conditions there is never Scrofula except from bad or improper management after birth.

The means of preventing these unfortunate consequences to offspring are, for persons of Scrofulous habit not to marry, or if they do, be sure not to marry those tainted in constitution similar to themselves.

We are aware that advice on marriage, may be considered gratuitous, but we cannot be faithful to the subject without mentioning it, as we are among a great number of persons who have studied the physical laws on the subject of reproduction of the species, and have arrived at the conclusion that no one has a right, knowingly, to perpetuate sickness and misery in the world, without incurring responsibility on account of it, nor a right to charge upon what they call the will of, or a dispensation of Providence, what is clearly owing to their own infractions of natural and physical laws; for that Scrofula will reproduce itself, is as certain as if you cast a stone into the air, it will come down again. Cousins and Second Cousins should *never marry*.

Children that are well and perfect when born, and of sound parents, may have a scrofulous habit produced in them in a variety of ways; and among these may be mentioned, too much confinement in hot and badly aired rooms, improper diet and at irregular times, too much confectionary and pastry, sweets always having a tendency to injure the appetite and do not give strength or even sustain life; too much and too little clothing, damp basements for nurseries; taxing the mind too much, with not sufficient exercise of body and muscles in the open and fresh air; confining children in hot and badly ventilated school rooms, where there are from two to four or five hundred in a room, as in the Ward schools in this city; these causes combined, and operating at the same time, will, as a general thing, produce feebleness of both body and mind, and a Scrofulous tendency in the most perfect child that ever was born; and it is always some one or all of these nurseries of disease, that destroy one half nearly of the children born in this city before they are seven years old, and the balance of more than the half, before they are twenty-five years old, and of those that are left, we think

it will be difficult to find more than two out of ten, that have not an imperfection of physical health of some kind, to transmit to the generation that shall follow them, to keep the stock of enfeebled and wrecked bodies and minds perpetuated through all time.

The causes of these wretched conditions, in children, having been in some measure pointed out, we should fail in our purpose if we do not indicate some means of avoiding the consequences of past errors. As we have said, avoid marrying and re-producing it ; secondly, when it does exist, to obviate its effects and consequences as much as possible, is the next point to be gained ; to do this, let the nursery be a large, airy room, not even on a ground floor, well ventilated, and never warmer in cold weather than from sixty-five to seventy degrees of the thermometer, good nourishing food and at proper times, plenty of friction to the surface of the body, and as soon as the child can run and use its limbs, let it be encouraged to do so, and at all times in suitable weather, to walk and ride ; do not confine them, if able to go out, in school-rooms and the house, it is of no consequence if they do not more than learn to read before they are from eight to ten years old. Give them a room, in bad weather, especially devoted to play, in which they can have all kinds of gymnastic exercises in accordance with their size and ability ; have them go through from three to ten minutes every day, seeing that things are so arranged that they cannot hurt themselves, and in this way you can develop the physical forces. Of course under the above directions the children are supposed not to be sick, and in all cases where children are delicate and feeble, the foregoing directions combined with the daily use of Magnetic-Electricity, to impart vitality to the whole system, promote digestion and circulation of the blood with vigor, give the elements of strength. Sometimes these measures may need some aid from strengthening medicine given to the child, which, if judiciously advised, will always help ; far, too often, the medical means are misjudged, and something given that would more likely interfere with health and vigor from mistaken notions and conceptions of what is required, and prescribing for names and symptoms, rather than the absolute condition upon general principles. We will not venture to say that all children of Scrofulous tendencies can surely have them removed, and good constitutions given in their place, but we think it *can always be done*, while it is still latent, and

the vital organs and powers not yet seriously affected. In the latter cases, we have succeeded whenever we have had a chance, and good physical powers have been given in their stead, as will be seen in the cuts and cases representing Spinal Curvature and Deformities, which are all truthful demonstrations of the above principles ; and can be repeated as often as the parents and friends of patients require it done in their children, if they give us a chance, and comply with the requisitions necessary to secure such a result.

For these purposes our measures consist of three particulars, Medication which generally is little, and always strengthening and alterative ; Exercises of all kinds, and especially those that are calculated to develope weak parts, and the daily use of Magnetic-Electricity, and this last mentioned agent is as important as any, for the first two will not succeed in all cases without the latter, nor the latter without both the first, where there is much to be done ; and we know that in thousands of cases, and perhaps all cases of latent Scrofula, where, as yet, no particular organ or set of organs are especially involved, the daily use of Magnetic-Electricity would prevent its development, (as in a case tending to Curvature, White Swellings, Enlarged Glands, &c.,) by giving to the patient appetite, vigor and vitality, good circulation, digestion, and a vigorous performance of functions by means of which strong health is secured. All these results are the more certain when early applied, and the time required to bring them about much less.

We would particularly draw the attention of the reader to cuts of cases represented on the following pages resulting from our treatment of Spinal Curvature and Deformities in which the physical changes in the person of the patients are fully shown, as the casts prove, that were taken when the patients came to us for treatment, and casts taken of the same case and patient, when they were discharged as cured ; the first cast exhibiting all the signs of physical debility and weakness, and the last casts, signs of physical strength and good health, and we are happy to say the patients are still alive, and can show for themselves a state of strong and vigorous health, though several years have passed.

From all facts stated under this head, every Scrofulous person, and family in which there is a Scrofulous or feeble and delicate child, should use daily a Magneto-Electric machine of proper construction, and they will be greatly im-

proved by it, if they have colds, influenzas or catarrh, it will be helped by it, but what is still better, they will seldom or scarcely ever take cold if they use them, and thousands of dormant or latent Scrofula, and tendencies to Consumption will never be developed, and an infinite amount of human happiness produced in consequence.

It should not be supposed that we imagine for one moment, that we have stated one-half of the means to be adopted to avert the development of Scrofula, in all cases ; it would require a book by itself, nor have we more than glanced at some principal causes of it, and some measures used to avoid its development and progress, as to the general character of the means we use to change the Scrofulous Diathesis or tendency to that of a contrary one, giving in its stead, strength, vigor and symmetry of form.

THE MODE OF USING THE MACHINE in all the conditions under this head, is general, and may be accomplished by the patient holding a pole in each hand for a few minutes, and then placing one pole in a foot bath, keeping the other in the hands still, or the pole that is put in the bath, may be taken by another healthy person in one hand, and then pass their other hand all over the person of the patient. All delicate and feeble persons of every age, that is, young or old, should do that once a day, and they would find their health and strength improved, and life prolonged.

DEFORMITIES OF THE FEET AND LIMBS.

In Deformities of the feet and limbs, consequent upon paralysis of one or more muscle, or sets of muscles, the author has succeeded in restoring them to symmetry of form in their shape, with a good degree of natural power to the limb, in a manner quite satisfactory to the patient as well as to himself.

It will be observed that, in none of these cases here illustrated by cuts, do we include such deformities of the feet as are congenital club feet, or those deformed feet with which children are born, but such only, as are the result of paralysis of one or more muscle in the limb.

Many children from one to three years old, from irritation of the bowels or teething, or both, are suddenly seized with

paralysis of one or both extremities, sometimes it follows a severe fit of illness of some kind, such as Diarrhœa, Dysentery, Fever and Fits.

In Paralysis growing out of any of these causes, it should always be cured immediately, while it is only Paralysis, and it can be easily done by the use of Magnetic-Electricity, and it is only such cases as are not cured then, from which these deformities result, and as both sets of antagonizing muscles do not become equally restored, one set of muscles, of the limb coming to their power first, and the extensor muscles coming later; the flexor muscles first contract and draw into a state of extension the extensor muscles, and the limb is deformed, because the weaker extensor muscles that are more thoroughly paralyzed than the flexors, can never, without help, bring to a natural position the limb, and hold it there, and hence the deformity results.

The above is the only kind of deformity of the limb, in which Magnetic-Electricity is of any use, and in these cases it will always cure it, while Palsy, if applied properly and thoroughly, and save the deformity, and it is the only means by which the deformity can be cured, without leaving the child more or less lame for life, with a weak limb. We have always succeeded in curing these cases without cutting the tendons, or any surgical operation, and without a moment's confinement of the patient to the house, or from play or books, more perfectly than they possibly can be, by cutting the tendons, and with infinitely better limbs.

This is done by curing the Paralysis by Magnetic-Electricity, and overcoming the contraction of the muscle by mechanical means, all of which, can certainly be done without any pain or confinement whatever to the child, and with the success here exhibited in the cuts, which we believe will be satisfactory to all, while cutting the tendons to restore the deformity leaves a perpetual lameness of the limb for life.

FIG. 1—Represents the foot of a child, eleven years old, showing a complete paralysis of the muscles on the front part of the limb, and those on the back side being contracted, throws the foot down in the manner seen in the cut. This cut is made from a drawing of a cast that was taken of the limb when it came to us for treatment, and shows the exact form and position of the foot on which the child had walked for seven or eight



Case 1—FIG. 1.

years, causing a great deformity of the foot, very irregular and uncertain step, and destroying all her future prospects of happiness. The above case was a sequel of scarlet fever.



Case 1—FIG. 2.

FIG. 2.—Represents the same foot and limb as in Fig. 1, after six week's treatment by the author without a moment's confinement to the house, pain to the patient, or any kind of surgical operation, or cutting of tendons; and there cannot be a doubt, but that this mode of managing, secures a much better limb, with its natural powers. The above results are secured entirely by the use of Magnetic-Electricity to restore the paralysis of the muscles, and an apparatus applied to the foot to extend the contracted muscle to its natural length. At the close of the period here spoken of, you have the deformity removed, but more time is required to restore full power and balance in the action of the muscles.



Case 2—FIG. 3.

FIG. 3.—Represents the foot of lad twelve years old, who had a paralysis of the leg at a little over a year old, which was not restored at the time only partially. This deformity grows out of the loss of power in one set of muscles to operate with equal force against another set, and the tendency of all muscles being to contract on themselves, those that regained their power contracted with force sufficient to bring the foot in the position seen in the cut Fig. 3, which is from a cast taken of the foot and leg when received for treatment. The above case was a sequence of Dysentery.



Case 2—FIG. 1.

FIG. 4.—Is a drawing made from a cast taken of the same foot and leg as represented in Fig. 3, after treatment thirteen weeks, without cutting of tendons or confinement to the room or house, or pain to the patient—an entire restoration of the deformity with good power and use of the limb. In this class of deformities the same result has always been obtained by the author, and there is no reason why others should not obtain it, if they use the means. The author deems the exhibition of two cases, as good as more, out of the many he has thus cured.

SPINAL CURVATURES, AND DISTORTIONS, OR SCROFULA AFFECTING THE MUSCLES.

Having made under the head of Scrofula in General, and Growth and Physical Development of Children, many remarks that are equally applicable under this head, and pertinent to this subject, the author recommends the perusal of those two subjects before reading this, to save a repetition of many things which would leave this article imperfect without setting them forth here, if they were not there illustrated.

This is another form of Scrofula, and is always accompanied with its attendants, debility and a lack of vitality, from enfeebled performance of the vital functions of life, deficient development of the chest, lack of force and quantity of circulating blood, and deficient development of muscle, one of the great sets of physical apparatus to the animal machine, which throws all out of balance; and discord in action, and deformity of the person, are an inevitable result.

Having, for the last nine years, devoted a large portion of our professional labor and study, too seek a means by which this formidable and distressing class of diseases could be remedied, we are able to say that every case, taken early, or when it first shows itself, can certainly be remedied, and good strong health, and full development of muscles given the patient when early attended to, and perseveringly pursued. Cases of from three to seven years standing we have always succeeded in curing, but much more time, labor and effort are required to secure the same result.

There are some cases connected with Caries of the Bones, (a state of things that can always be detected) that make the case more doubtful and difficult to accomplish, but we have succeeded whenever we could rally the physical forces to strength. We have treated one case that had existed twenty years, and the subject was fourteen years old when it commenced, and we have raised the spine six inches in length that was before sunk by curvature and lost in the length, with great improvement of health and strength, and if it do not get entirely well in form, it will be because a few of the bones of the spine, have grown together in their deformed state, a circumstance which sometimes occurs.

We mention this last case, not to invite persons who have been thus long afflicted, to come to seek a remedy, but to show that however bad a case may be, or of long standing, they

can be somewhat improved in form, and much in health, by our course of management and treatment ; at the same time, we never could advise one to seek a remedy, whose case is as bad as the case (of twenty years standing) mentioned, without making up their mind to fully devote their time to it, and continually labor for it for years, as nothing short of it can accomplish much, and with it a great deal can be done to improve the health and form, even of as bad a case as the one last mentioned.

We cannot here enter into a detail of treatment which is necessary for the accomplishment of this great object, further than simply to say, that it is embraced under three principal heads, Medical, Mechanical and Gymnastic exercises, with the daily use of Magnetic-Electricity, and in case of any importance, it cannot be accomplished in a permanent manner, so that the patients shall be well and remain so, with good forms, without combining all of these means.

Some things we ought to mention, viz : we do not use any mechanical means that are the least embarrassing to the free use of all the muscles and motions of the body. Full and free exercise is enjoined, no lacings allowed about the chest or waist, no brass corsets allowed to be worn on any account, no forcible mechanical extensions, or drawing out of the person as on a bed stretcher or inclined plane, beyond what may be obtained by simple means, and the patient have good refreshing sleep while it is being done ; but everything done and insisted on, that can develope muscle, expand the chest, improve the strength and digestion, strengthen the force of the circulation, give a full development of the vital functions, securiug to the patient, both then and ever after, an entire change in their habit of body and Scrofulous tendency, to that of health, strength, agility and symmetry of form, as are so well and truthfully illustrated in the cuts representing the cases as they came to me for treatment, and casts taken of the same cases after treatment and at different periods of the same.

It is proper here to remark, for those who do not know it already, that these casts of the back and feet are as exact as the cast of a person's mouth upon which a dentist works his gold plate to make an artificial set of teeth, fastened by atmospheric pressure on the gums, that is, they are absolute copies to the nicety of a hair's breadth, as the mould is made on the back of the patient, as for any other casting.

SPINAL DEFORMITIES—LATERAL CURVATURE.



FIG. 1.



FIG. 2.



FIG. 3.

FIG. 1, is the form of a cast taken at the commencement of treatment of Miss M. E. V. S., aged 13 years. This cast was taken May 24, 1846, showing a Curvature of three years standing, in which there was a thin muscle, and all the physical forces in a low state, and flesh thin, as will be observed by the projections of the spinal column and shoulder blades.

FIG. 2, is the form of a cast taken of the same case, after eight weeks treatment, on the 25th of July, following, showing, a perfect form, good chest and plump muscle. This case forcibly illustrates the advantage, and benefits of an early attention to, and treatment of these cases of deformity, at a time when a cure may always be looked for with confidence.

A SPINAL DEFORMITY—A CASE OF ANGULAR DISTORTION.

FIG. 3, is a profile or side view of a case of Angular Distortion of the spine, drawn from a cast taken at the time the case was received for treatment. This Distortion originated from a psoas abscess in the lumbar region, when the child was passing from three to five years old; the distortion of the spine came on after he was five years old, and was of eight years standing. His name was A. B., thirteen years old, of this State, and he was so weak in the back, when he came to the author, that he could not sit at the table to take his meals, without resting on his elbows, or turn himself over in bed, without first getting upon his elbows and falling over on his other side.



FIG. 4

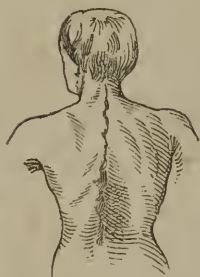


FIG. 5



FIG. 6

FIG. 4, is a back view from the cast taken of the same case, A. B., at the same time, these two cuts showing the entire shapelessness of the body to the human form.

FIG. 5, is a drawing of a back view of a cast taken from the same case, A. B., after three months treatment by the author, showing very evident improvement in form and figure, with a good beginning to the development of muscle.

FIG. 6, is the form of a cast of the same case, A. B., taken after the patient had been with us about seven months. Two and a half months of that treatment was interrupted by illness, and the spinal treatment and exercises had to be suspended on account of it, so that there was, in fact, but four and a half months of spinal treatment spent on this case, to bring about the changes of form, developing a figure of human shape, and some strength of muscle. We are not able to show a cast of this case as cured, because the patient and family were in very low circumstances, and depending on the charity of their friends, and when we came to this city, the patient could not come with us.

LATERAL OR BILATERAL CURVATURE OF THE SPINE.

FIG. 7, is the form of a drawing of the first cast taken of Miss M. B. B., of this State, aged sixteen years, when she came for treatment. This is a Lateral Curvature of seven years standing, and the following truthful delineation shows how thin and emaciated is the figure in this form of Scrofulous disease, and how



FIG 7



FIG. 8

attenuated are all the muscles, giving evidence of great vital and physical debility of the whole system, and all its organs and apparatus.

FIG. 8, is an engraving of a cast taken after four and half months treatment of Miss M. B. B., showing a beautiful form, full and strong figure, well developed chest and muscle, and these results are always accompanied with good vigorous health. These physical changes, *that are so obvious in this case*, are absolute essentials to a permanent cure that will remain, with good health; and anything short of such a result, is comparatively good for nothing, for it only raises the patient up for a time, to let them fall again into hopeless despondency and misery, if the treatment be not persevered in until a cure is effected.

GENERAL REMARKS ON DEFORMITIES OF THE SPINE.

In speaking of these Deformities that are illustrated in the foregoing cuts, the author is disposed to make the following remarks, viz: first, that all cases taken early, or when they first make their appearance, as in Figure 1, shown in case first, can certainly be cured, if they are not complicated with other disease, that would be impracticable with our treatment, or such as would forbid the necessary exercises; secondly, these physical changes are an indispensable requisite to a permanent cure of the disease, or a tendency to it—and it is impossible to bring them about, without combining the necessary means for it, viz: MEDICAL, MECHANICAL, MAGNETIC-ELECTRICITY and GYMNASTIC EXERCISES, all in the same case; thirdly, any treatment that confines the motions of the body, or prevents free action of the chest and muscles, or *any* motion of the body and limbs, will prevent a cure taking place. Any confinement of the body on a bed, or bed-stretcher, inclined plane, chair with crutches, brass or other metallic corsets, or

any lacings about the chest and stomach, that embarrasses or confines them, to prevent free muscular motion, free respiration and circulation, tends to form a hinderance, and prevent a cure from taking place.

Such treatment must inevitably weaken and debilitate the patient, besides being painful to bear, when there is no occasion for *anything painful* or *inconvenient*, beyond a necessity to perform certain well directed exercise in a persevering and proper manner, in our treatment of these cases.

We ought to state, that the changes in form and physical strength here represented in the cuts, may not be realized in every case in the proportion of time here mentioned, as all cases equally bad do not progress in improvement alike, nor can we make them.

We ought to say to all persons afflicted with this form of disease, that it is nearly useless to undertake to seek a remedy, unless they will comply with everything that is essential to success in its treatment, for which the indispensable essentials are, a determination of *will*, to do the work of exercise that is required to make the cure permanent with lasting good health. In every case, however bad, there will be *improvement in form and health*, and such cases as the first cut represents, will be *certainly cured*; and case third, (Figure 7) in longer time will arrive at the same happy result; and case 2d (Figure 3) we have *no reason to doubt*, would also arrive at a happy termination, but more time would be required than above mentioned. The object to be accomplished is great, and the labor is great in proportion to the extent of the deformity.

THE MODE OF USING MAGNETIC-ELECTRICITY, in Spinal Deformities, is both general and local. It may be used over the chest and body in the same way and for the same purpose, that we recommend it in all other forms of Scrofula, and locally on the muscles, which we wish to strengthen and develop. It should be used every day, and on those particular muscles, with as strong a current as can be well borne by the patient, as the action of Electricity promotes the growth and development of the whole person, and especially the muscles, when weak and deficient.

I N D E X .

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Abdominal Distention	43	Blood, Flow of Irregular.....	82
Absorption, promoted by Elec- tricity	84	Blown or Hoven Cattle	80
After Pains.....	77	Congestion.....	84
Agitans, Paralysis,	53	Chronic Bronchitis,	81
Age Renewed.....	66 68	Cancer,	41 75
Ague and Fever,.....	60	Chloroform, Poisoning by.....	74
Albugo,.....	83	Cataract,.....	72
Alterative Action of Electricity,	84	Conception, False	77
Amaurosis	41	Curvature of Spine,	103 108
Ani, Prolapsus of.....	28	ClubFoot,	100
Ano, Fistula in.....	43	Causes of Failure,	6
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Anchylosis	78	Catarrh in General,.....	59
Anasarca.....	51	Callouses,.....	81
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Amenorrhœa	26	Cholera Infantum.....	30
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Asthma,	70	Consumption,	87
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Do. From Poisoning by		Congestion of Blood,.....	84
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Do. Poisoning by Opium	21 22	Crick in Side or Back.....	80
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Atrophy, or Wasting of a Part,.....	84	Chlorosis,	38
Army need a Machine,....	6 10 to 14	Chorea,.....	39
Atonic State or General Debility.....	83	Catalepsy	39
Buboes	42	Cornea, Opacity of,	83
Bite from a Mad Dog.....	27	Chronic Ulcers.....	41
Bleeding from the Womb,	23	Cancerous Ulcers,	41 75
Bloodlessness,	38	Calculus, or Stone in Bladder,	48
Bilious Colic,.....	29	Constipation,.....	44
Belly Ache in Horses.....	79	Coma,.....	62
Bruises,.....	60	Crisis of Fevers,.....	62 89
Blood, Disease of.....	82	Corratum Secale,.....	46
Bright's Disease,.....	40	Cancerous Orum,	79
Bowels, Falling of,	28	Cattle, Hoven or Blown,.....	80
Buried Alive	65	Children, Growth of	94
Bladder, Stone in.....	40	Calculus,	48
Backs Weak.....	80	Diseases of the Skin,.....	59 77
Backs, Stitch or Crick in.....	80	Diseases of the Blood,.....	82
Breathing Difficult,	83	Distribution of Blood,.....	82
Baldness.....	66	Debility, General,.....	83
Bowels, Pain in,	63	Dyspnœa, or Difficult Breathing,	83
Bones, Scrofula of.....	94	Dysmenorrhœa,.....	25
		Draught of Cold Water,	30 31

Death, Apparent,	65	Fainting,	64
Diarrhœa,	30	Gall Stones, in passage of,	34
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Deafness,	55	Gangrene or Mortification,	32
Delirium Tremens	44	Gout,	37
Drinking Habitual,	45	Gastralgia, or Pain in Stomach,	35
Diabetes,	40	General Palsy,	52 53
Dropsy of the Limbs,	51	Goitre,	76
Dyspepsia,	62	Gutta Serena,	41
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Diseases, Nervous,	64	Galvanic Cataplasms, or Poultices	76
Difficult Breathing,	83	Growth of Children,	93 94
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Deformities, Scrofulous,	100 103	Gray Hairs,	66 80
Development, Physical	94	General Debility,	83
Detection of Needles,	71	General Remarks on Galvanism,	10
Disease of the Knee Joint,	90	Hoven or Blown Cattle,	80
Disease of the Hip Joint,	90	Hip Joint, Disease of,	90
Disease, Hereditary,	94 96	Horses over Fed, Colic,	79
Dry Gangrene,	33	Heat, Animal,	64
Drowning,	19	Hereditary Disease,	94 96
Drunkenness,	21 45	Hysterical Palsy,	53
Emissions, Nocturnal,	64	Hiccough,	45
Exhaustion from any cause,	89	Horned Rye or Secale Cornutum	46
Erysipelas,	58	Hydrocele,	75 76
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